

# THE *Soybean Digest*

OFFICIAL PUBLICATION • AMERICAN SOYBEAN ASSOCIATION



U.S.D.A. photo.  
Spreading limestone on ground planted to soybeans. Truck hauls seven ton loads. J. J. Mertz farm five miles S. E. of Columbus, Ohio. 7/1/43.

FEBRUARY ♦ 1955

VOLUME 15 ♦ NUMBER 4

**Better Solvents  
mean  
Better Products**



## You don't learn how overnight!

### **Skellysolve for Animal and Vegetable Oil Extraction**

#### **Applications**

**SKELLYSOLVE-B.** Making edible oils and meals from soybeans, corn germs, flaxseed, peanuts, cottonseed and the like. Closed cup flash point about -20°F.

**SKELLYSOLVE-C.** Making both edible and inedible oils and meals, particularly where lower volatility than that of Skellysolve-B is desired because of warm condenser water. Closed cup flash point about 13°F.

**SKELLYSOLVE-D.** Quality solvent at competitive prices. For degreasing meat scraps, extracting oil-saturated fuller's earth, general extraction uses. Closed cup flash point about 3°F.

**SKELLYSOLVE-F.** Extracting cottonseed meals and other products in laboratory analytical work. Originally made to conform to A.O.C.S. specifications for petroleum ether, and for pharmaceutical extractions, where finest quality solvent is desired. Closed cup flash point about -50°F.

**SKELLYSOLVE-H.** Making edible and inedible oils and meals where greater volatility is desired than that of Skellysolve C or D. Closed cup flash point about -20°F.

**"Doc" MacGEE Says:** When it comes to striking "pay dirt" with a new product or real "gold" with an old product, there is just no satisfactory substitute for manufacturing know-how and experience. And whether yours is a new product looking for consumer acceptance or a firmly established old product that wants even wider distribution — if a *better* solvent can help you, now is the time to check into Skellysolve.

**In dealing** with Skellysolve, you deal with folks who speak your language. We have worked with your industry for years and years—an experience that pays off in a quick grasp of your solvent application problems — and a *speedy* solution of them.

**Most important of all,** when you

make Skellysolve your solvent source, you're *always* certain of solvent quality. Uniformity is certain, batch after batch, to protect the uniformity of your manufacturing processes. You're certain, too, about boiling ranges, toxicity levels, sulphur content, sweet odor and low end points. You're certain of every feature that means low solvent losses, fast vaporization from oils and meals — every feature you demand from your solvent.

**You'll be certain** of dependability of supply, too when you specify Skellysolve. Even the nation's worst floods have never stopped Skellysolve deliveries! Write for more facts — or for special studies of your solvent problem, call in the Skellysolve Technical Fieldman. No obligation, of course!



# Skellysolve

INDUSTRIAL DIVISION, SKELLY OIL COMPANY  
KANSAS CITY, MISSOURI

# THE *Soybean Digest*

REG. U. S. PAT. OFF.

HUDSON, IOWA

Vol. 15

February, 1955

No. 4

## IN THIS ISSUE

Editor's Desk .....	4
GEO. M. STRAYER	
Growers .....	6
Fertilizers Can Make a Difference! .....	8
Late News .....	11
Most Widely-Grown Varieties .....	14
The Cover Picture .....	16
Seed Treatment of Soybeans .....	17
G. E. O'BRIEN AND T. W. BRASFIELD	
Hearings on Soybean Grades .....	18
Need for Changing Buying Practices Also.....	19
RICHARD PHILLIPS	
Soybean Meal Primary Source of Amino Acids.....	20
H. L. WILCKE	
West Germany Large Fat Market.....	22
Publications .....	23
Freer Trade Key to Exports.....	23
K. V. SRI RAM	
Letters .....	24
Grits and Flakes .....	26
New Products and Services .....	31
Washington Digest .....	32
PORTER M. HEDGE	
Market Street and Seed Directory.....	34
In the Markets .....	35
Market Summary .....	38

## THE SOYBEAN DIGEST

EDITOR.....Geo. M. Strayer  
MANAGING EDITOR.....Kent Pellett  
BUSINESS MANAGER.....Geo. McCulley  
DIRECTOR OF CIRCULATION  
Delmar C. Cobie

### OFFICES

Business, publication and circulation, Hudson, Iowa.

Advertising, Ewing Hutchison Co.,  
35 E. Wacker Drive, Chicago 1,  
Illinois.

Published on the 10th of each month at Hudson, Iowa, by the American Soybean Association. Entered as second class matter November 20, 1940, at the post office at Hudson, Iowa, under the Act of March 3, 1879.

Forms close on 25th of month preceding. Subscription rates—to association members, \$2.50 per year; to non-members, \$3.00 per year; Canada and other members of the Pan-American Union, \$3.50; other foreign, \$4.00. Single copies 30c.

## THE AMERICAN SOYBEAN ASSOCIATION

### PRESIDENT

Jake Hartz, Jr., Stuttgart, Ark.

### VICE PRESIDENT

Albert Dimond, Lovington, Ill.

### EXECUTIVE VICE PRESIDENT

### AND SECRETARY-TREASURER

Geo. M. Strayer, Hudson, Iowa

DIRECTORS: Jake Hartz, Jr., Stuttgart, Ark.; C. G. Simcox, Assumption, Ill.; Albert Dimond, Lovington, Ill.; LeRoy Pike, Pontiac, Ill.; Ersel Walley, Fort Wayne, Ind.; Chester B. Biddle, Remington, Ind.; Geo. M. Strayer, Hudson, Iowa; Howard L. Roach, Plainfield, Iowa; John W. Evans, Montevideo, Minn.; Herbert H. Huddleston, Lamont, Miss.; Harold A. Lumsden, Essex, Mo.; O. H. Acom, Wardell, Mo.; John Sawyer, London, Ohio; David G. Wing, Mechanicsburg, Ohio; Gilles DePutter, Appin, Ontario, Canada.

Objectives of the American Soybean Association include the bringing together of all persons interested in the production, distribution and utilization of soybeans; the collection and dissemination of the best available information relating to both the practical and scientific phases of the problems of increased yields coupled with lessened costs; the safe-guarding of production against diseases and insect pests; the promotion of the development of new varieties; the encouragement of the interest of federal and state governments and experiment stations; and the rendering of all possible services to the industry.

State 2-0350

Teletype CG 283

# *Zimmerman Alderson Carr Co.*

Chicago

Member Chicago Board of Trade

BROKERS TO THE SOYBEAN PROCESSOR

New York

San Francisco



## EDITOR'S DESK

### HEARINGS ONLY THE FIRST STEP

Hearings on the proposed changes in the federal grading standards on soybeans will be in progress when you receive this issue. Representatives of the American Soybean Association will be present at every hearing to support the proposal pertaining to lowering the allowable percentages of foreign material in each numerical grade. Representatives of farm organizations and of several elevator groups will also testify favorably.

A federal grade on any commodity must always be one which reflects comparative values, which can be applied at each step along the line of handling, and which does not allow the handler to profit by grade change. The grades, coupled with buying practices, should reward the careful producer of a high quality product, and should penalize the producer of a poor quality product. The present grades do not provide that differential. Instead, they, through high foreign material allowances, tend to penalize the man who should be receiving a premium, and then subsidize the producer of the poor quality product.

A number of other proposals are to be considered at the public hearings. They are enumerated in this issue. The major one, so far as your Association is concerned, is that pertaining to foreign material.

Assuming changes are made in the federal grades, they will probably become effective with the start of the 1955 crop movement. They should be helpful in assuring the processor and the export buyer of a cleaner product. They should reward the careful producer.

But even with any changes which may be made this year we will have far from a perfect system of trading on soybeans. We will still be trading an oilseed crop on carbohydrate crop standards. We will still be giving no recognition to oil content, nor to the end product yields.

And coupled with cleaner soybeans the processors should make up their minds to institute premiums for low moisture. Until they do so they are not paying the man who gives them the best product. If discounts for high moisture can be justified, then certainly premiums for low moisture can also be justified. One is as fair as the other. The measure of value to the processor is the yield of meal and oil resulting from a bushel of soybeans. None will deny that a bushel of 10 percent moisture beans produces more oil and meal than a bushel of 14 percent moisture beans. Why not pay for it? Instead of merely discounting for high moisture?

Would the start of the 1955 crop movement, when grade changes will go into effect, not also

By GEO. M. STRAYER

be a good time to start paying premiums for low moisture? So processors can prove they mean it when they say they will pay a premium for a good product?

### LOW SUPPORTS MAY MEAN FEWER ACRES

Representatives of the American Soybean Association, together with representatives of the processors and the farm organizations, met at Washington on January 19 with USDA officials pertaining to 1955 price support programs on soybeans. At this writing no announcement has been made, and it is not known how soon the 1955 details will be announced. But certain facts are evident.

The 1955 support level on soybeans will be lower than 80 percent of parity, in line with the announced policy of the Administration to lower all support prices. Announcement was made some time ago on a lower support level for feed grains. There may or may not be a support price program on 1955 crop cottonseed. There may or may not be a support price on 1955 crop soybean oil.

The 1955 acreage of soybeans will be determined by a number of factors. One will be restricted acreage on other crops, and a consequent shift to soybeans. One will be the selling price of soybeans at planting time. Another will be the support price level which is announced.

In your editor's book a low support level (USDA officials are talking about 70 percent of parity) may well bring higher priced soybeans next fall. Reduced supports will mean lower acreage. Lowered acreage means less bushels, more competition for available supplies, and higher prices. It is my belief that continuation of the 80-percent-of-parity support level would have brought about the same acreage of soybeans as in 1954. A 70 percent figure of about \$2 per bushel will bring lower acreage. And it may bring higher selling prices!

Probably even more important is the selling price of soybeans of old crop on April 15. Should the large reported bushelage of soybeans still on farms and in country elevators force prices downward at planting time then 1955 acreage will definitely go down—and fast! Support prices are a decided factor, and a floor under prices is very conducive to constant acreage when that floor is in correct relationship to other commodities.

High selling prices and reasonable support levels will bring good acreages of soybeans in 1955. Low selling prices and low supports will bring less acreage, and given normal crops, may well result in higher selling prices for the 1955 crop. **Strange—but true.**



*Here's  
why*

# COLUMBIAN

**BOLTED STEEL  
GRAIN STORAGE TANKS**

*were Specified  
by*

**FARMERS CO-OP ELEVATOR  
Venango, Nebraska**

**1 Efficient storage, naturally.** Farmer's Co-op now has fire-proof, weather-droo-rodent-proof storage that never cracks or crumbles. Easily cleaned. Requires no patching or caulking. In every climate, 30 years of actual service prove Columbian ideal for small grain. None has ever worn out; none has ever been bested by a tornado.

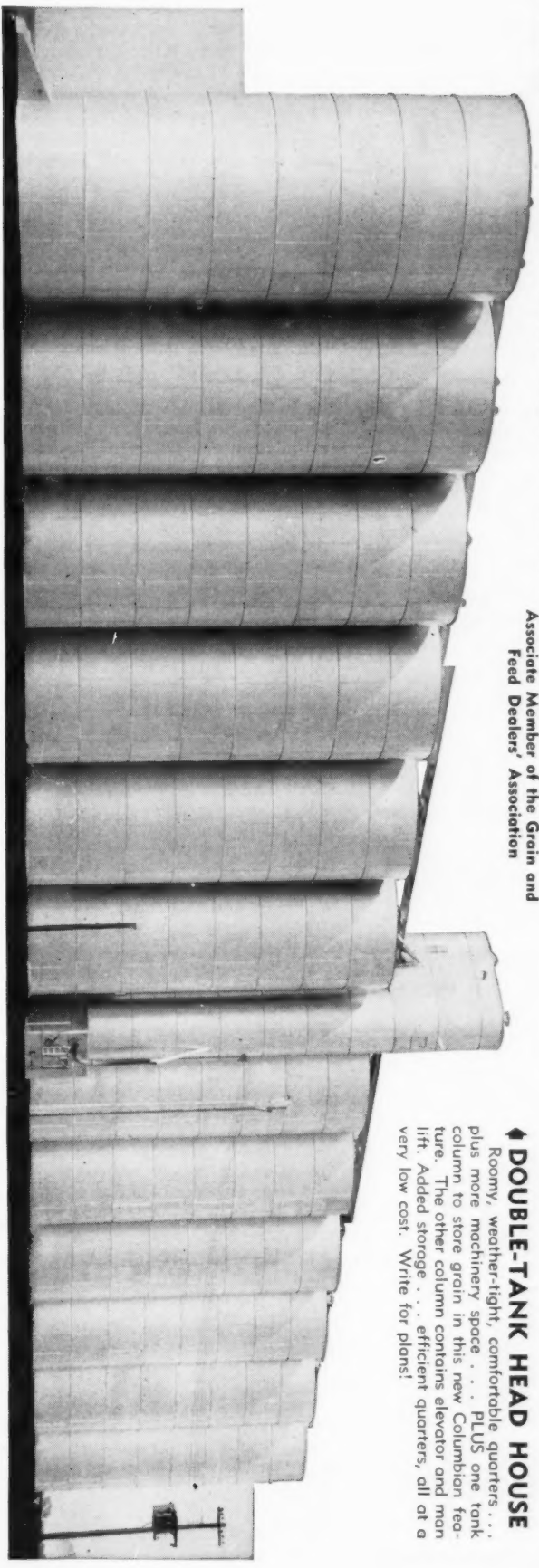
**2 Quick erection.** In a matter of days, your completed elevator goes from foundation into service. No forms, no skilled labor needed. No special tools. Use local workmen . . . or Columbian furnishes a supervisor for your men . . . or Columbian contractors will do the complete job from ground breaking to turning the key in the lock opening day!

**3 Low cost.** First cost is lower . . . maintenance cost is but a trifle. And on additional tank or tanks can be added as needed, anytime. Twelve new Columbian Bolted Steel Grain Tanks now give Farmers' Co-op at Venango 330,000 bushels of the most modern, safe, clean, efficient storage. What are **your** needs? Write for free, illustrated literature.

**COLUMBIAN STEEL TANK CO., P.O. Box 4048-U, Kansas City, Mo.**

Associate Member of the Grain and  
Feed Dealers Association

**DOUBLE-TANK HEAD HOUSE**  
Roomy, weather-tight, comfortable quarters . . . plus more machinery space . . . PLUS one tank column to store grain in this new Columbian feature. The other column contains elevator and man lift. Added storage . . . efficient quarters, all at a very low cost. Write for plans!



## GROWERS

### Soybean Prices Could Go Either Way

**I**N THE past few years it has paid farmers about one year in two to hold soybeans past January, and the gains have been larger than the losses.

This year prices can go either way, according to T. A. Hieronymus, farm economist at the University of Illinois. There is no dominant factor in the soybean market indicating a big change either up or down before summer, the economist says. There are several factors influencing prices in both directions.

Hieronymus lists five factors pointing to higher soybean prices after January:

1—Exports of edible fats and oils are at record levels. Our customers need fats and have the money to pay for them.

2—The use of fats and oils in this country is at a high level.

3—Stocks of fats and oils held by the Commodity Credit Corp., especially cottonseed oil, are going down, and decreasing stocks usually indicate rising prices.

4—Livestock numbers are increasing. This fact, coupled with an increase in consumption of soybean

oil meal per animal, means a market capable of absorbing a record supply of meal at good prices.

5—Soybeans are in strong speculative hands.

On the other hand, Hieronymus sees five factors that could send soybean prices down:

1—The current crop of 343 million bushels is the largest on record.

2—Broiler production is down somewhat, and chick production will likely be off in the spring because of low egg prices. Poultry is one of the most important users of soybean meal.

3—Consumption rate between October and December seems to have been slow because of the usual summer reduction in soybean crush. A strong farmer holding movement has reduced soybean crush and is tending to dampen, if not to reverse, the normal seasonal price trend.

4—Rapid sale of cottonseed oil by the government may increase the carryover not held by government so that the price of soybean oil may go down, even though the fats and oils situation generally indicates rising prices.

5—Supplies of soybeans are large enough to have a substantial carryover, and later prices will likely be affected more by growing-season prospects than prices have been in the past.

### Manganese Deficiency

**S**OYBEAN PLANTS seem to have a "weather eye" that controls their ability to absorb manganese from the soil, an Ohio agronomist said.

Speaking at the annual meeting of the Soil Science Society of America, at St. Paul, Henry J. Mederski of the Ohio Agricultural Experiment Station said greenhouse tests showed that soil moisture and soil temperature influenced manganese absorption by the plants.

Low soil temperature along with high soil moisture caused soybean plants to develop severe foliar symptoms of manganese deficiency. A reversal of this condition caused only minor signs of a lack of the element.

Mederski obtained his data by growing soybean plants in glazed pots filled with a manganese deficient clay soil and placed in constant temperature water baths. He also provided two different soil moisture levels at each temperature.

Soil temperature seems to be the more important factor, Mederski observed. At either high or low soil moisture, stepping up the temperature increased the plant manganese concentration.

Oddly enough, Mederski's tests showed that the heavier manganese absorption at the higher soil temperature may occur without any increase in the soil manganese itself.

Now, it appears there is a logical reason for the sharp line of contrast between discolored lower leaves of the soybean plant produced in the cool, moist season and the normal green upper leaves which grew in the warmer, drier months.

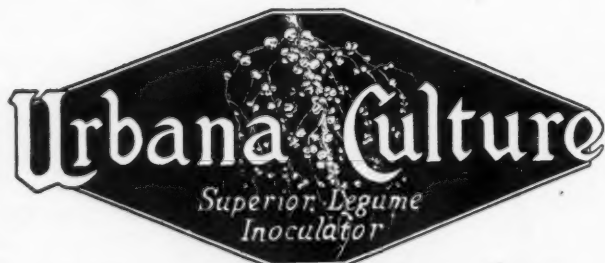
### Lee in Limited Supply

**O**NLY a few Arkansas producers will have a limited supply of certified Lee soybean seed for sale for next spring's planting, according to W. H. Freyaldenhoven, extension agronomist.

The Arkansas Seed Council allocated about 700 bushels of registered Lee seed to producers in 14 counties for certification purposes this past year. But summer drought reduced yields on many farms where the Lee was growing for seed increase purposes.

# INOCULATE SOY BEANS

with



## IT PAYS!

**The Urbana Laboratories**  
Urbana, Illinois

Freyaldenhoven said the Arkansas Experiment Station will not be in position to satisfy the demand for foundation seed this year.

Foundation seed was allocated to the following counties this past year: Greene, Craighead, Mississippi, Crittenden, Poinsett, Jackson, Woodruff, Pulaski, Jefferson, Arkansas, Crawford, Pope, Little River and Miller.

## Germination Report

**SOYBEANS** are acting up again this year according to tests made by the Seed Certification Service at Purdue University, K. E. Beeson, extension agronomist at Purdue, reports.

Of over 500 samples germinated by the first of the year, 30 percent fell below the 80 percent minimum required for good seed, Beeson reported. Ten percent of the 500 are germinating less than 70 percent.

In many cases, low germination can be traced to samples that are above 14 percent moisture, according to Charles Coons, certification manager. This is a warning to Indiana farmers, Coons asserts, to check the moisture content of their bins.

Weed content of soybean fields was higher than usual in 1954. Following the wet weather of early November, moisture of beans in the field was often higher than earlier in the season. During the late combining season moisture ranged to 18 percent or above.

Ordinarily the cool weather that prevails in late November and thereafter, permits safe storage of soybeans carrying more than 14 percent moisture until spring. The Indian summer weather that developed in Indiana in late November, however, has doubtless contributed to the heating of wet beans in the late fall and resulted in a drop in germination.

Samples taken from bins in December showed as high as 20 percent moisture. Such beans not only fail to grow but are rotten. Late harvested soybeans are showing many rotten seed in the germinators.

In taking samples for testing, deep and representative probing is important. Farmers should remember that the driest spots at this time of the year are around the walls, and the wettest spots are in the surface of the bins.

Al Carter of the Indiana State Seed Laboratory at Purdue urges farmers not to delay in getting seed samples for germination through the laboratory. Later in the season the rush of germination work results in delays.

JANUARY, 1955

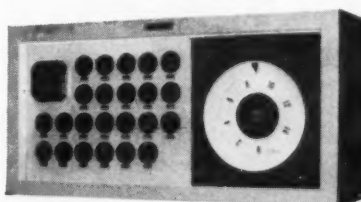
## Stored grain protected

by



**spot**  
temperature  
system

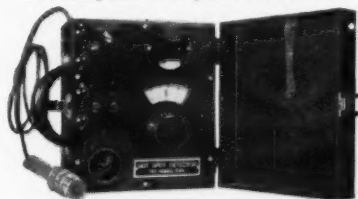
**GRAIN ELEVATORS**, terminals and country stations throughout the world are finding the Hot Spot Temperature Measuring System the accurate, convenient way to guard against spoilage. The first, modern, electronic system for checking grain temperatures, the Hot Spot System pays for itself by pointing accurately to local heating that accompanies moisture pockets, mold or germ action, or insect damage.



*Minneapolis-Honeywell instrument*



*Minneapolis-Honeywell instrument*



*Minneapolis-Honeywell instrument*

**Switch-controlled unit**, installed in the gallery or headhouse, lets you scan through each bin manually from top to bottom in a matter of seconds. The temperature measuring instrument is a Minneapolis-Honeywell *ElectroniK* Potentiometer, developed especially for this system . . . responds to changes as small as one-fifth of a degree Fahrenheit.

**Automatic scanning system**, designed for location in your office, automatically switches through each point in each bin. Coded signal lights identify each temperature point as it is measured. The Minneapolis-Honeywell *ElectroniK* instrument gives quick, accurate indication of temperature. System can also be operated manually.

**For spot checking**, use this compact Portable Potentiometer, developed by Minneapolis-Honeywell for Hot Spot Detector, Inc. A jack plug lets you connect the bin thermocouple cable for an on-the-spot measurement.

Complete grain temperature measurement systems are available on purchase or lease plan. For full facts, write to us today.



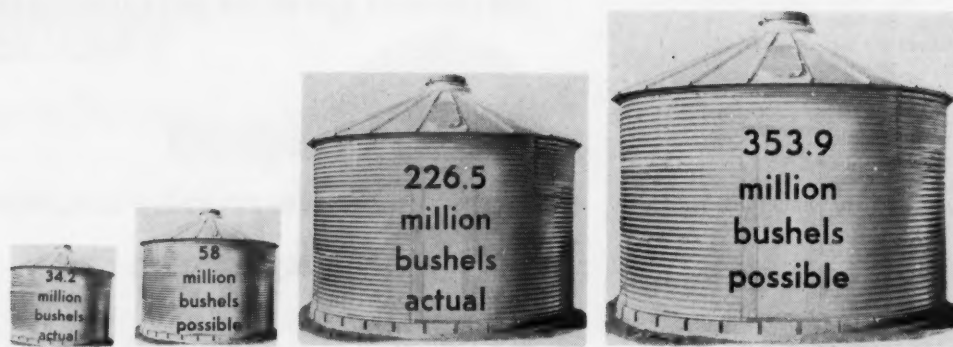
**spot detector, Inc.**

426 Keo Way

Des Moines, Iowa

Instruments, for Hot Spot Detector Systems, are made exclusively by Minneapolis-Honeywell . . . *First in Controls*





FERTILIZERS could make a difference. Two bins at left represent actual production in Southern states in 1950, and production possible through full use of fertilizers. Two bins at right represent actual and possible production in the North Central states.

## Fertilizers CAN Make A Difference!

(A staff report)

**A** TRULY tremendous increase in soybean yields is possible through full fertilization of the soybean crop, according to a recent study by the national soil and fertilizer research committee of the U. S. Department of Agriculture and the Land Grant Colleges.

The committee's findings apparently shoot full of holes the common assumption that it doesn't pay to fertilize soybeans.

Here's the usual rule, especially on dark Northern soils: Keep up the fertility of the soil, yes. And fertilize some other crop in the rotation. But not soybeans.

But how are we going to square this with the fertilizer committee study? Apparently a continuing re-examination of the problem of fertilizing soybeans is in order.

Full fertilization of the soybean crop would produce the greatest increase in yields in the South. The USDA and college committee study estimates that an overall 70 percent increase could be made in soybean yields in the South through full fertilization. Average yield there in 1950—the year the study covers—was 20 bushels. But potential yield in the South through full use of fertilizers was 34 bushels, the committee estimates.

Potential yield increase in the North Central states is not so great, but still large. Average per-acre yield there in 1950 was 23 bushels.

But potential yield through full fertilization was 36 bushels, the study shows.

A 400-million-bushel soybean crop was possible on the acreage planted in 1950 in the North Central and Southern states alone, the study shows. This compares with the 266 million bushels actually produced in these sections in 1950. And with the 342 million bushels produced in the whole United States in 1954, the largest crop to date.

The fertilizer committee study does not attempt to answer the question of whether the heavy use of fertilizers required to produce this kind of yields would pay. It only tries to determine what the possibilities are for soybeans and most other crops produced in the United States.

There are obviously some conditions where direct application of fertilizer to the soybean crop does pay. We have listed some of them in the box on the opposite page.

Apparently the fertilizer problem on the dark, high fertility soils of Minnesota, Iowa, northern Illinois, western Ohio and also many of the Delta or river bottom soils of the South continues to be one of maintaining a high degree of fertility and of fertilizing the crop or crops in the rotation where it will do the most good.

H. J. Mederski of the Ohio State Experiment Station states the case

for these other states as well as Ohio: "The most profitable way to maintain soybean yields is to apply liberal quantities of fertilizer to corn, small grains and meadow crop. The soybeans respond just as well to the fertilizer applied to other crops as they do when applied on soybeans."

And Donald G. Hanway of the Nebraska Experiment Station says: "Production practices that result in a high yield level for corn and other crops in the rotation will maintain fertility so soybeans will have good yields without direct fertilization in their turn."

There are exceptions, of course, even in the above named states. For instance, it is estimated fertilizers are needed on almost half the land growing soybeans in Illinois; and one-fourth the land in Iowa.

It is best not to be guided by general recommendations for your state or area. Know the fertility level of the soils on your farm. Use the soil testing service of your state experiment station, county agent or other agricultural agency in determining your soil's needs. And fertilize accordingly.

Here are the observations of soils specialists in the different states growing soybeans:

**Minnesota.** A. C. Caldwell at the University of Minnesota reports very little response in experiments where fertilizers have been used in the row or plowed down.

Soybeans seem to do best in following crops like corn that have been heavily fertilized. When applied directly to soybeans during the growing season fertilizer has not increased yields on most Minnesota soils. But on some fields with a long history of non-legume crops, nitrogen has increased soybean yields. Where soil tests for phosphorus and particularly for potash are very low, soybeans respond to these fertilizers.

**Indiana.** Quoting S. A. Barber at Purdue University: "For the farmer who is in the business for a number of years and wishes to make the largest return on his investment our philosophy is to build his soils up to their appropriate levels if they are not already there and then he needs to fertilize only sufficiently to maintain them at these levels. When this is done it is not necessary to apply fertilizers in the row for soybeans."

"When the soils are rather deficient and the farmer is limited in capital he of course can obtain good returns by applying a small amount of fertilizer in a band near the soybean row."

Barber says the level of 200 pounds of phosphorus and 250 pounds of potash per acre is close to the breaking point where no increase in yield is received on soybeans.

But on some soils it is very difficult to build up the levels of soil potassium. Barber recommends that where fertilizing is done on a soil building basis, the potash be applied for the rotation and the amounts adjusted according to what the soil test shows.

R. R. Mulvey at Purdue says that most of the cropped land in Indiana requires 30 pounds of  $P_2O_5$  and 30 pounds of  $K_2O$  per acre for high crop yields. It need not be applied to the soybean crop.

**Ohio.** H. J. Mederski: Where yields are below 20 bushels per acre an application of 200 pounds of 0-12-12 should be applied before planting. On very low fertility fields where yields are 15 bushels or less, use a complete fertilizer such as 3-12-12 or 5-10-10.

**Illinois.** J. W. Calland, National Soybean Crop Improvement Council: To step up soybean yields, lime and potash are the most important requirements. They are most often needed on the potash-deficient soils in southern Illinois, the low lime areas and the sandy soils.

Neither phosphorus nor nitrogen has increased soybean yields very much, but they may be needed on other crops. On the high fertility soils of Illinois soybeans usually fail to show any response to direct fertilizer. The rule here is to put enough fertilizer on the rotation to

## Fertilization of the Soybean Crop Pays on:

- 1—Soils low in lime, nitrogen or organic matter, phosphorus or potassium.
- 2—Farms with no rotations and with little manure, fertilizer or clover; or where the rotation is mainly corn and soybeans.
- 3—Fields where the preceding crop was not fertilized.
- 4—Soils where soybeans do respond to direct fertilizers.

take care of all the crops, and the soybeans will take care of themselves.

**Iowa.** W. H. Pierre and J. T. Pesek, Iowa State College: The best guide is a soil test. Soils very low in either phosphorus or potash should receive fertilizer directly on the soybean crop. Tests indicate about a fourth of all soybean fields in Iowa need fertilizer.

**Missouri.** Lime as needed. Apply mineral fertilizers to soybeans unless liberal fertilizer applications have been applied to crops immediately preceding. Fertilizer has given good returns on the light-colored soils of northeast and southwest Missouri, and on the dark-colored soils of average fertility in northwest Missouri. They have also shown good results in many cases on the more fertile dark-colored soils of the state.

**Arkansas.** R. L. Beacher, University of Arkansas: Soybeans should respond to lime and fertilization with phosphorus and/or potash on any soil that is very low in these elements as determined by soil test or other suitable means. Well over half the state's soybean acreage falls into this category.

**Delta Soils of Mississippi, Missouri, Arkansas and Louisiana.** In general there is no response to fertilizers on soybeans in these soils. But E. E. Hartwig of the Delta Branch Experiment Station says soil tests are in order, as they sometimes are in need of lime, phosphorus, potash or nitrogen.

**Coastal Plains Soils of North Carolina, Georgia, Florida, Louisiana and Arkansas.** Soybeans grown on these soils respond quite profitably to direct fertilizers. These soils are of light texture, have been farmed for a long time, and are inherently low in nutrients.

Much of the soybean crop in the Southeastern states is grown in a two-crop system of farming where the winter crop of potatoes or small grain is heavily fertilized. In this system soybeans often are not fertilized.

**Louisiana.** Over a three-year period soybeans with lime and fertilizer produced an average of 35 bushels per acre, but only 21 bushels without.

**North Carolina.** Astor Perry, North Carolina State College of Agriculture: The major soybean area in North Carolina is the Tidewater section, i.e., coastal counties north of Morehead City. The principal crops in these counties are corn, truck crops and soybeans. The rotation, therefore, has been primarily two years.

Fertilizer recommendations are made on the basis of soil tests and soybean growers in general rely quite heavily on them. The rotation mentioned above, when fertilizer recommendations are followed, is sound from the fertility standpoint even to the extent that there is a gradual buildup of the fertility level. Many of the truck crops are used in the rotation and in many cases are as good as the crops men-

(Continued on Page 16)



—USDA Photo.

The soybean field in which Norval Pepper is standing on his farm near Georgetown, Delaware, received lime treatment. The small beans in the foreground did not receive lime. Note the difference.



## When Old Customers Come Back For More... *That's Proof*

No Other Type Of  
Grain Storage Facility  
Gives You All **6** Features!

1. Absolute protection against moisture and vermin!
2. Greatest possible fire protection!
3. Cleaner, safer grain storage!
4. Faster and cheaper erection!
5. More economical operation!
6. Lower insurance rates on contents!



**BLACK, SIVALLS & BRYSON, INC.**

Agricultural Division — Dept. 10-AM2

7500 East 12th Street

Kansas City 26, Missouri

### **of Product Performance and Customer Satisfaction!**

Back in 1949, the Sinton Elevator & Storage Company of Sinton, Texas, was a small grain operation with a total storage capacity of 28,260 bushels. In 1950 they decided to expand their facilities by adding fifteen new BS&B Bolted Steel Grain Tanks, with an additional storage capacity of 207,422 bushels!

Then again in 1954—when the operations of this company had outstripped storage capacity—six additional BS&B Bolted Steel Tanks were installed, adding another 84,858 bushels of storage capacity. This increased the total from 28,260 bu. to 320,540 bu. in only four years time—all with BS&B Bolted Steel Tanks!

According to Mr. Tom West, President and Manager of the Sinton Elevator & Storage Company, one feature that he likes in particular about these BS&B Tanks is their excellent "grain keeping" qualities. Says Mr. West, "I especially like BS&B Tanks because they keep the grain so well that I only have to turn it about *three* times a year. This saves considerable operating expense over a period of time!"

Surely this is about as convincing proof as anyone could want that BS&B Bolted Steel Tanks are today's *best investment* in commercial grain storage facilities! If you are in the market for additional grain storage capacity, why not talk it over with your BS&B Representative the next time he calls . . . or write to us for complete information? No obligation, of course!

**BS&B Bolted Steel Tanks Are Ideal For Fish And Vegetable Oils, Too!**

They have found wide use in certain geographical areas for the clean, safe storage of fish oils, peanut oil, linseed oil, flaxseed oil, cottonseed oil and molasses. Whatever and wherever your storage needs, BS&B Bolted Steel Tanks will meet your specifications — and at lower cost!

ASSOCIATE MEMBER, GRAIN AND FEED DEALERS NATIONAL ASSOCIATION



# Late News

Published 32 times  
yearly as a service  
to the soybean  
industry.

Vol. 3, No. 1

Hudson, Iowa, Feb. 6, 1955

## SUPPORT PROGRAM

Announcement of the 1955 soybean price support program apparently will not come right away. Flax advisory committee goes to Washington next week to discuss flaxseed program with Commodity Stabilization officials and announcement will be after that, as USDA officials have indicated, cottonseed, flaxseed and soybean programs are all to be announced at the same time.

Government now leans toward: **\$2 loan on soybeans, a support on soybean oil, and the dropping of cottonseed support.** But this is not final. For more details see Washington Digest page 32.

## STOCKS REPORT

There is the usual first of the year discrepancy between the government's soybean stock reports and its crop estimate. Agricultural Marketing Service estimates stocks in all positions as of Jan. 1: on farms 150.2 million bushels; terminals 8.5 million; processing plants 44.6 million; elevators 57.7 million. Total stocks were 261.2 million bushels, 35 million bushels more than a year ago. But about 208 million bushels, or well over half the crop, were being held by farms and elevators as of Jan. 1. **This was 76 million bushels more than was in the same position a year ago.**

If 65 million bushels processed and 28 million bushels exported to Jan. 1 be added to the stocks total, it adds up to 354.1 million bushels, or 11 million bushels more than the 343 million bushels estimated for the 1954 crop. Allowing for 1.3-million-bushel carryover from 1953 crop, there is still a 10-million-bushel discrepancy. **Either the stocks have been over-estimated or the 1954 crop was under-estimated.** Probably the former.

## UNDER LOANS

First reports coming to the Digest after the close of the loan period Jan. 31 **do not indicate as many soybeans went under loan as was earlier expected.** North central Iowa and northeast Missouri reports estimate about 30 percent of the crop under loan in those areas. But these are the only two reports indicating any large volume under the support program that have reached us so far. Guesses of the total under support have ranged from 40 to 50 million bushels.

## CROP MOVEMENT

There has been some increase in soybean crop movement from the Northwest and some tendency for producers to sell when the price approaches the \$2.75 level. A sizeable quantity moved from Minnesota to Chicago in January, according to D. W. Moebius, General Mills, Inc., soybean buyer at Minneapolis.

And says Louis Brewster of the General Mills, Inc., Rossford, Ohio, plant: "I believe the goal of \$3 has been lowered by many owners. A price of \$2.75-\$2.76 has brought out some and it looks like \$2.80 would bring out a little larger volume; \$2.85-\$2.90 would be even larger. But processors are limiting their purchases. I believe what soybeans are moving now are moving into processors' plants, but in small volume. **Processors are not extending their position whatsoever** but are operating with a minimum inventory."

Moebius says: "I question whether the holding movement has



## REPORT ON EXPORTS

paid off. Bids today are 5 cents over bids on Oct. 15 and this increase wouldn't cover storage charges. About the only thing farmers have accomplished so far is to defer the depressed market which we have previously had during the fall movement."

Total inspections for overseas export and to Canada through Jan. 21 were 29.3 million bushels, **about 5 million bushels more than for the comparable weeks a year ago**, according to reports by Agricultural Marketing Service. Soybean exports totaled 12.8 million bushels in November and about 9 million bushels in December as compared with 7.7 million bushels in December of last year.

W. L. Richeson & Sons, Inc., New Orleans, reports 1.7 million bushels of soybeans loading and to load out of New Orleans for export during the Jan. 24-Feb. 15 period.

World consumption of fats and oils is outrunning production, according to Dr. Tom E. Doak, Longstreet, Abbott & Co., St. Louis, as reported by Trade News Service, New York. Dr. Doak points out that U. S. edible oils no longer have a ceiling over them because Commodity Credit Corp. cottonseed oil stocks are vanishing. **Any surprise ahead probably will be on the bullish side**, he says.

Dr. Doak says his firm does not anticipate any large increase in the soybean crop for 1955, though such an increase is generally expected by the trade.

## 1955 ACREAGE

Opinion has not jelled yet on the size of the 1955 soybean acreage. Reporters who express an opinion mostly look for **little change in the upper Midwest** and some increase in the Midsouth. Low prices at planting time could have an adverse effect in the North.

Dixon Jordan, Standard Commission Co., Memphis, sees about a 10-percent increase in acreage in the Midsouth, with the cotton acreage allotment having more effect than the support level at planting time. A western Iowa forecast is that acreage in that area will be down a third due to compliance with increased corn allotment.

## REPORTS ON SEED

Most reports on seed germination coming to us are good, and apparently seed quality generally will be much better than last year. There are exceptions in Indiana and some localities farther south. For Indiana report see page 7. The expectation seems to be almost universal that there will be a plentiful supply of viable seed for planting this spring. See Seed Directory, page 34.

	Cash price to farmers for No. 1 soybeans Jan. 31	Price to farmers for No. 2 soybeans Jan. 31	Price to farmers for bagged soybean oil meal Jan. 31
Ark. ....	\$2.40 @ \$2.60		\$75 @ \$80
Ill. ....	2.71 @ 2.74	\$2.73	80 @ 85
Ind. ....	2.62		88
Iowa ....	2.55 @ 2.60		78
Kans. ....		2.59	82 83
Ky. ....	2.64		81
Minn. ....	2.50		77
Mo. ....	2.67		88
Ohio ....	2.62 @ 2.66		
Tenn. ....	2.70		80



# NEW CASE "75"

## handles beans gently



Foremost among many features of the new Case "75" Combine that contribute to gentle handling is the Case spike-tooth cylinder. Its width (28 inches), balanced to cutting and separating sections, keeps the incoming mat of material thick enough to cushion beans against damage or cracking.

Spike teeth increase the rubbing area many-fold to provide extra threshing capacity. Sturdy teeth comb through long stalks and tough pods to get every possible bean.

Greater threshing efficiency lets you operate the Case cylinder at slower, more gentle speeds. Cylinder drive is readily varied from 360 to 1060 RPM. A special sprocket allows speeds as low as 190 RPM.

Gentle handling also describes the Case 6-inch sump-type elevator with cup-type overshot flights, long popular with bean growers. Beans are moved fast enough to avoid clogging, yet gently enough to prevent damage.

*See Your Case Dealer . . . Ask for a Demonstration*

Your Case dealer will be glad to demonstrate the "75" or other Case combines. Find out why buyers prefer Case-threshed beans. Ask your dealer about the Case Income Payment Plan. Write for booklets to J. I. Case Co., Dept. Racine, Wis.



# Most Widely - Grown Varieties

Characteristics and performance of the leading varieties.  
List prepared by agronomists in soybean growing states.

## Northern Varieties

**\*Acme** is approximately 10 days earlier than Flambeau. It has gray pubescence (short hairs on stems, leaves and pods), purple flowers and yellow seed and hilum color (seed scar). Normally two to three seeds per pod. Growth erect, strong straw.

**Adams** has averaged two or three days earlier in maturity than Lincoln and about the same in oil content, plant height and resistance to lodging. Adams beans are pale yellow with a light brown hilum while the plants have a gray pubescence, white flowers and light straw-colored predominantly three-seeded pods.

**Blackhawk** has averaged five or six days earlier than Hawkeye and is characterized by pronounced upright growth, sparse branching, white flowers, gray pubescence, medium height, straw yellow beans with a light brown hilum and light brown predominantly three-seeded pods.

**\*Capital** is of approximately the same maturity as Ottawa Mandarin and is characterized by its relatively poor resistance to lodging, white flowers, gray pubescence, medium

\*Canadian variety.

height and straw yellow beans with a similarly colored hilum.

**Chief** has averaged approximately a week later in maturity than Lincoln, grows tall and is characterized by relatively poor resistance to lodging, gray pubescence, purple flowers and normally two- or three-seeded pods. Chief beans are straw yellow and have a slate colored hilum with a brown outer ring.

**Chippewa** is approximately five days earlier than Blackhawk, yet is equal to it in yield and oil content and is superior in lodging resistance. It has purple flowers, brown pubescence, and yellow seed with a black hilum.

**Clark** has proved superior to Lincoln in yielding ability but matures about a week later. Clark beans are straw yellow, nearly round and slightly larger than those of Lincoln and have a prominent black hilum. The plants are medium in height with some branching although most of the pods, usually two- or three-seeded, are borne on the main stem. Like Lincoln Clark plants have brown pubescence but unlike Lincoln they have purple flowers instead of white.

**\*Comet** matures about the same as Flambeau. It has gray pubescence, purple flowers and yellow seed and

hilum color. Normally two to three seeds per pod. Growth erect, quite resistant to lodging.

**Earlyana** is approximately of the same maturity as Blackhawk but is characterized by somewhat poorer resistance to lodging. This variety has brown pubescence, purple flowers, normally two- or three-seeded pods, while the beans are straw yellow with a pale hilum with a brown speck at one end of the hilum.

**Flambeau** is early, averaging a week to 10 days earlier than Ottawa Mandarin. Flambeau is characterized by brown pubescence, purple flowers and normally two- or three-seeded pods. Seeds of Flambeau are straw yellow with a black hilum.

**\*Goldsoy** has averaged approximately a week earlier in maturity than Ottawa Mandarin and is characterized by rather poor resistance to lodging. Goldsoy has gray pubescence, purple flowers and normally two- or three-seeded pods. Beans of Goldsoy are straw yellow with a similarly colored hilum.

**\*Hardome** is similar in maturity to Capital, grows slightly taller and is slightly less subject to lodging. The plants have white pubescence and purple flowers. Seeds are yellow with a gray hilum.

**\*Harly** has averaged approximately five days later in maturity than Ottawa Mandarin and is characterized by purple flowers.

**\*Harmon** has brown pubescence, purple flowers, and normally two- to three-seeded pods. Beans of Harmon are straw yellow with a black hilum. In respect to maturity Harmon has been classified as a Group II variety, or in other words, approximating Hawkeye in time of ripening.

**\*Harosoy** has averaged about four days earlier in maturity than Hawkeye and is characterized by a gray pubescence and purple flowers with gray-brown pods which are normally two- or three-seeded. Harosoy beans are straw yellow with a similarly colored hilum.

**Hawkeye** has averaged approximately six days earlier than Lincoln in maturity and similar to Blackhawk in general appearance although it is slightly taller and has purple flowers instead of white. Hawkeye also has gray pubescence while its beans are straw yellow and moderately large with an imperfect black (black with a brown outer ring) hilum.

## TO COMMODITY EXECUTIVES ANNUAL REPORT

During 1954 The Leslie Commodity Letter suggested 25 commitments in Chicago Board of Trade futures contracts. By December 31st 17 trades showed profits and 8 indicated losses. Our market recommendations were 68% correct.

Net profits during the year totaled \$6555, after deducting commission charges and losses, based on a 5,000 bushels unit of each suggestion.

If you are interested in being among the first to receive the latest accurate commodity statistics, as well as complete market facts (often not found in any other periodical), subscribe at once. You will receive this week's important letter by return mail.

### The Leslie Analytical Organization

1227-B Bryden Road

Columbus 5, Ohio

1 year \$85

6 months \$50

5 weeks \$10

Gentlemen: Please send me your weekly letter for the period circled.

Name .....

Street .....

City .....



**Lincoln** has brown pubescence, prominent branches, moderate height, good lodging resistance, white flowers and dark brown, predominantly two- or three-seeded pods. Beans of Lincoln are straw yellow with a prominent black hilum and are moderate in size.

**Monroe** is five days earlier than Earlyana, and is very similar to Earlyana in height, yield, and oil and protein content, but it stands better than Earlyana. Monroe has purple flowers, gray pubescence, and straw-colored seeds with colorless hilum.

**Norchief** is approximately four days earlier than Capital and Mandarin (Ottawa) and three days later than Flambeau. It is superior in yield to Flambeau, in lodging resistance to both Flambeau and Capital, and in oil content to Flambeau and Mandarin (Ottawa). In other important characteristics it is about equal to these varieties. Norchief has purple flowers, brown pubescence and yellow seed with a black hilum.

**Ottawa Mandarin** has averaged approximately nine days earlier than Blackhawk and approximately eight days later than Flambeau. Ottawa Mandarin is characterized by a gray pubescence, purple flowers, and normally two- to three-seeded pods.

Ottawa Mandarin beans are straw yellow with a similarly colored hilum.

**Perry** has averaged about a week later than Chief or five days later than Wabash. Perry has gray pubescence, purple flowers, and dark gray, predominantly two- or three-seeded pods. The beans of Perry are straw yellow and moderately large with a black-brown hilum.

**Renville** has averaged approximately three days later than Ottawa Mandarin or approximately six days earlier than Blackhawk. Renville is characterized by white flowers while its beans are straw yellow with a light brown hilum.

**Richland** is of approximately the same maturity as Hawkeye and has gray pubescence, purple flowers and normally two-seeded pods. Beans of Richland are straw yellow with a light brown to brown hilum. This variety is outstanding in resistance to lodging and has been used as a source of germ plasm in many crosses to develop lines of differing maturities which have greater lodging resistance and higher yields than Richland.

**Wabash** is approximately three days later in maturity than Chief, is considerably more resistant to lodging, and has a higher oil content than does Chief. Wabash is

characterized by a gray pubescence, white flowers and light straw-colored, predominantly two- or three-seeded pods.

## Southern Varieties

(Listed in order of maturity)

**Dorman** is approximately 18 days earlier than Ogden, the leading variety planted in the Southern states. Dorman has given good results in the heavy clay soils of the Mississippi Delta from southeast Missouri to northeast Louisiana, on the bottom lands of the Arkansas River in Oklahoma, and in eastern Virginia. In these areas, yields of Dorman have been very similar to those from Ogden. Dorman holds its seed very well, has good seed quality, and high oil content. The plants have heavy foliage and medium-sized stems which dry out uniformly at maturity. In areas where Ogden can be grown, the primary advantage of an early variety such as Dorman, is to lengthen the harvest period and thus permit harvesting a greater acreage per combine.

**S-100** is comparable to Dorman in maturity. S-100 has given best results in southeastern Missouri. In more southern or eastern areas, S-100 has a tendency to produce plants with heavy stems, which re-

main green after the seed is mature. This causes difficulty in combining. The narrow growth type does not shade out weed growth late in the season. S-100 averages considerably lower in oil content than other commonly-grown varieties.

**Dortchsoy 67** averages five days later in maturity than Dorman and 13 days earlier than Ogden. Dortchsoy 67 is in general adapted to the same area. Dortchsoy 67 produces yields comparable to Dorman, but is more subject to shattering. It has good oil content. The plants have heavy foliage and medium sized stems.

**Ogden** is the most widely grown variety in the South. It produces high yields of seed with a good oil content. Its moderate height makes it easy to combine. Its heavy foliage helps appreciably in keeping down late-season weeds and grasses. In areas which may have dry harvest periods such as are sometimes experienced in the Delta area of Mississippi, the acreage of Ogden should not exceed that which may be harvested in 15 to 18 days following maturity because of its tendency to shatter. The Ogden selections, Dortchsoy 2 and Hale Ogden 2, have given results similar to those from Ogden. Ogden is somewhat short for production on the lighter soils of south Alabama and west Florida.

**Lee** is a new variety released to seed producers for further increase in 1955 which is expected to replace Ogden on much of the acreage where it is now grown. Lee averages five days later than Ogden and resembles Ogden in height and general growth characteristics. Lee is superior to Ogden in seed holding, seed quality and seed yield. Lee has shown very little shattering eight to ten weeks after maturity. It is resistant to the diseases bacterial pustule, wildfire, frog-eye, and purple seed stain. It is moderately resistant to the leaf disease target spot. Lee is adapted to the same general area where Ogden is now grown. Since Lee is slightly later than Ogden, it should not be planted as far north as Ogden is now grown. Lee is rather short for production on the lighter soils of south Alabama and west Florida.

**Dortchsoy 31** matures approximately 12 days later than Ogden. Its growth characteristics are very similar to those for Ogden, but it holds its seed much better. In relation to Roanoke, Dortchsoy 31 has averaged lower in oil content and has usually yielded appreciably less than Roanoke in the Delta area of Mississippi and Louisiana because of its high susceptibility to the leaf disease target spot. This disease

causes early defoliation. Like Ogden, Dortchsoy 31 is too short for satisfactory production in the lighter soils of south Alabama and west Florida.

**Roanoke** averages two weeks later in maturity than Ogden and grows six to eight inches taller. Roanoke produces good yields of high quality seed. It has the highest oil content of any variety grown in the United States. Roanoke will usually give higher yields than Ogden on the Upper Coastal Plain and Piedmont soils. In these areas, its added height is also an advantage. Roanoke has a tendency to lodge if planted too thick. In areas where it will mature, Roanoke makes an excellent variety to be grown along with Ogden to extend the harvest period. Roanoke has good seed-holding properties.

**Jackson** is a new variety now being increased which is similar in maturity to Roanoke. Jackson is adapted to much of the same area as Roanoke. It grows slightly taller than Roanoke and stands better. The added height of Jackson makes it well adapted for growing after oats or lupines in south Alabama, Georgia and west Florida. Jackson produces excellent seed yields and has a high oil content. It holds its seed very well. Seed supplies are limited in some areas.

**CNS** matures approximately five days later than Roanoke. CNS should be considered primarily as a forage variety because of its low oil content. CNS-4 is very similar in its characteristics to CNS. The CNS strain 24 or sometimes referred to as Clemson strain 24, is similar to CNS in maturity but grows much taller. It also has low oil content.

**J. E. W. 45** matures eight to ten days later than Roanoke. It makes moderate growth and produces good seed yields with a fair oil content in its area of adaptation. J. E. W. 45 is best adapted for late plantings on the Upper Coastal Plain soils of South Carolina, Georgia and Florida.

**Yelnando** is similar in maturity and general production to J. E. W. 45 but is taller growing. It is best suited for late plantings.

**Improved Pelican** is a late-maturing, rank-growing variety, developed primarily to produce a heavy tonnage of green material for turning under in sugar cane fields. Because of its rank growth, Improved Pelican is difficult to combine, especially if planted too early. When planted in late June or early July, Improved Pelican can be combined with greater ease. In late plantings it produces good yields of high quality seed.

For complete information on any of the soybean varieties listed in this article or shown on the variety map, write Soybean Digest, Hudson, Iowa.

## Fertilizers

(Continued from Page 9)

tioned. Such truck crops are usually heavily fertilized, the soybean crop following them seldom requires fertilization.

Last year 1188 soil samples were received by the soil testing division asking for recommendations for soybeans. On an acre basis:

76 percent needed 300-400 pounds of 0-10-20.

2 percent needed 300 pounds of 0-14-14.

1 percent needed 100-200 pounds of superphosphate.

18 percent needed 75-125 pounds of muriate of potash.

3 percent needed no fertilizer.

Lime:

38 percent needed none.

10 percent needed one-half ton.

18 percent needed one ton.

18 percent needed one and one-half tons.

16 percent needed two tons or more.

These figures indicate that most North Carolina soils need lime and fertilizer. Indeed these two factors are the limiting ones.

Much progress has been made, however, in the use of fertilizer for soybeans since the war and the average North Carolina yield has almost doubled.

**South Carolina.** W. R. Paden, Clemson Agricultural College: Soybeans are grown throughout the state on selected sandy loams but more extensively in the Coastal Plains area. In this area a double cropping system is generally practiced with soybeans and small grain. This provides full use of residual fertilizer nutrients.

Fertilizer recommendations for average sandy loam soil conditions are 400 to 600 pounds of 3-12-12 which is generally recognized as necessary for most satisfactory production. On soils with low phosphate reserves and low in available potash, 400 to 600 pounds of 3-9-18 is better suited.

**Mississippi.** Mississippi Farm Research: Tests in the Delta area have shown no response to fertilization. In the hill sections tests have produced variable results, but in general they indicate that on the less productive soils an application of 30 to 40 pounds of phosphate ( $P_2O_5$ ) and 30 to 40 pounds of potash ( $K_2O$ ) per acre are required. Highly acid soils (those having a pH of 5.5 or below) will need to be limed.

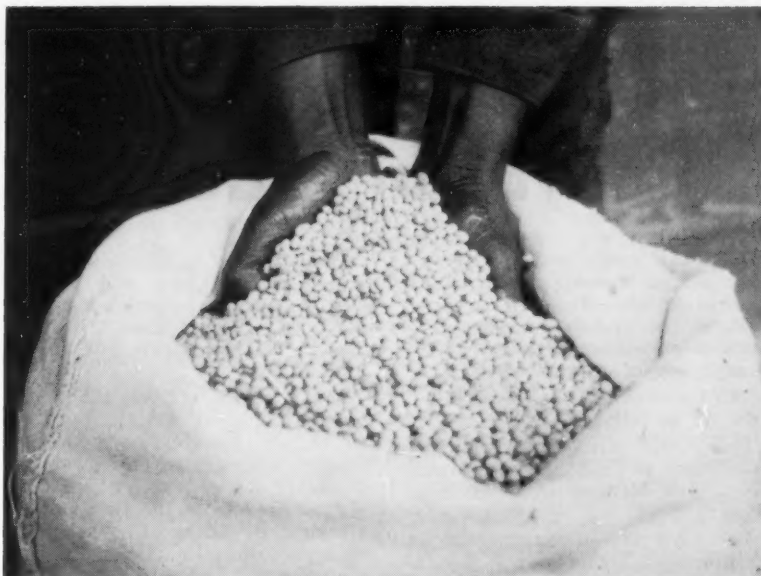
## THE COVER PICTURE

Limestone is being spread on a field planted to soybeans on the J. J. Mertz farm five miles southeast of Columbus, Ohio. The truck hauls seven-ton loads.



# 3 to 6 Bushels More from Seed Treatment of Soybeans

By G. E. O'BRIEN and  
T. W. BRASFIELD



**SOYBEAN SEED** is nothing more than a resting green plant and should be given all possible protection.

**A**LTHOUGH treatment of soybean seed has been recognized for more than a decade as an important factor in assuring good stands and increased yields, the soybean seed industry has not, as a whole, endorsed and accepted it wholeheartedly. Seed treatment does not replace, but simply supplements good cultural practices.

Modern high speed harvesting techniques and the handling thereafter often damage seed and lead to poorer stands and lowered yields. After all, the seed is nothing more than a resting green plant and should be given all possible protection. Data collected from experiment stations and users over the past 10 years definitely indicate that with a small investment in time and a few cents per acre, the soybean grower can increase his yields up to three to six bushels per acre.

Data conclusively indicate that treatment of soybean seed is particularly desirable if soybeans having a low moisture content are gathered or when lowered germination of seed is evident.

As a means of assurance, soybean

growers should plan their operation so that they either treat the soybeans themselves or have them treated by a commercial concern at the manufacturer's recommended dosage. Any grower can prove the value of this step by treating sufficient seed to plant two-thirds of his acreage, and planting untreated seed in the remaining third. This has been done by Gilbert J. Lindholm, Isanti, Minn., who writes:

"The yield difference in 1952 was three bushels per acre in favor of the Spergon-treated beans. In 1953 I treated my total acreage of beans, 75 acres. They averaged 20 bushels whereas the community average was several bushels less per acre. My 1954 crop is also all treated. The Spergon-treated beans stand all kinds of weather better. I regard the use of Spergon as a form of 'sure' crop insurance. The increased yield is such that the cost of Spergon treating is one of my most profitable investments."

The generic names for the two principal seed protectants utilized by seed processors and growers are chloranil (Spergon, Spergon-SL) and Thiram (Arasan, Thiram 50 Dust; Arasan SFX, Thiram-75W). While other chemicals have been tested, the preponderance of published data is on the above two compounds.

There have been a great many reports on the use of legume inoculants, before planting, and after the use of a chemical seed treatment; by far the most published data have been favorable toward use of an inoculant at manufacturer's recommended dosage immediately prior to planting.

Seed treatment definitely enhances your chances for better stands, better disease control, stronger, sturdier plants and higher yields. Your local seed dealer or seed processor can treat for you or supply you with chemical and directions for use.

**Members: Leading Exchanges**

*Denco Company*

**BROKERS VEGETABLE OILS, ANIMAL FATS**

Telephone: Webster 9-2055

327 So. La Salle Street, Chicago 4, Illinois

## USDA Announces

# Hearings Feb. 9-15 On Soybean Grades

**I**NFORMAL public hearings to receive comments on proposed changes in the official grain standards in the United States for soybeans were announced by the U. S. Department of Agriculture Jan. 6.

The times and places of the hearings are as follows:

Feb. 9, 2:30 p.m.—Room 312, Toledo Board of Trade, Edward Lamb Bldg., 418 Madison Ave., Toledo, Ohio.

Feb. 10, 2 p.m.—Room 438, Chicago Board of Trade Bldg., Chicago, Ill.

Feb. 11, 1:30 p.m.—Iowa Room, Savery Hotel, Des Moines, Iowa.

Feb. 14, 2 p.m.—Georgian Room, Peabody Hotel, Memphis, Tenn.

Feb. 15, 2 p.m.—Main Ball Room, Orlando Hotel, Decatur, Ill.

The proposed revisions would decrease the maximum limits of foreign material by 1 percent in each numerical grade; provide special limits for heat damage in each numerical grade; define or classify soybeans with green seed coats, which in cross section are yellow, as green soybeans instead of yellow soybeans as at present; restrict the definition of splits to pieces of soybeans that are not damaged; and reduce the maximum limit for moisture by 1 percent in grade No. 1.

### Alternate Proposal

Comments will be received also on an alternate proposal to decrease the maximum limits for moisture content by 1 percent in grade No. 1; five-tenths percent in grade No. 2; and 1 percent in grade No. 3, according to the Department of Agriculture announcement.

The first proposal, to lower the allowable percentage of foreign material in each numerical grade by 1 percent, was petitioned by the American Soybean Association. The other proposals originated in the Department of Agriculture.

The public hearings will be conducted by representatives of the Department of Agriculture and will be open to all interested persons. You may in addition submit written data, views or arguments to the director, grain division, Agricultural Marketing Service, U. S. Department of Agriculture, Washington 25, D. C., to be received by him not later than Feb. 28.

"We urge you to attend the hearings closest to you, and present your ideas on the proposed changes," states Executive Vice President Geo. M. Strayer, American Soybean Association.

"As a means of simplifying the present confused situation in our industry, we sincerely hope you will support our proposal to lower the allowable foreign material content. We believe this is the first step in placing the trading of soybeans, at all levels, on a sound basis.

"Processors are now in most cases buying on a U. S. No. 1 basis as a means of holding foreign material to a minimum. Exporters have encountered tremendous problems in high foreign material content. For the good of all segments of the soybean industry we feel this change is vital, and that it must come this year if we are to forestall further troubles. The proposal is practical, it is workable, it entails no hardships on any segment of the industry, it will benefit all segments. The end result will be higher prices and more profitable soybean production.

"You may, of course, testify favorably on one proposal, against another. Each proposal will be considered separately when the decision is made."

The following men are expected to represent ASA at the hearings:

Toledo—David G. Wing, Mechanicsburg, Ohio; Ersel Walley, Fort Wayne, Ind.

Chicago—LeRoy Pike, Pontiac, Ill.; Chester B. Biddle, Remington, Ind.; C. G. Simcox, Assumption, Ill.

Des Moines—Howard L. Roach, Plainfield, Iowa.

Memphis—President Jake Hartz, Jr., Stuttgart, Ark.; Harold Lumsden, Essex, Mo.; O. H. Acom, Wardell, Mo.; H. H. Huddleston, Lamont, Miss.

Decatur, Ill.—Vice President Albert Dimond, Lovington, Ill.; Chas. Schmitt, Beason, Ill.; L. E. Kennedy, Newton, Ill.

Strayer will attend all hearings except the one at Memphis.

Proposals to lower allowable foreign material content are being widely supported by farm and grain organizations including: American Farm Bureau Federation; Illinois, Iowa and Mississippi Farm Bureaus; Midsouth Soybean and Grain Ship-



—Courtesy Staley Journal

**CONDITION** of soybeans in storage is constantly checked at processing plants. Here Leo Edwards uses flashlight to look down into stored soybeans at A. E. Staley Manufacturing Co., Decatur, Ill.

pers Association; the Western Grain and Feed Association; and the Missouri Grain, Feed and Seed Association. The Farm Bureau organizations are coupling the proposals for lower foreign material with similar ones for lower moisture content, or a premium for low moisture content.

Higher standards proposed for official soybean grades by the American Soybean Association were described as an improvement by a farm economist speaking before the Farmers Grain Dealers Association of Iowa in Des Moines Jan. 26.

Vincent I. West of the University of Illinois said the new grade standards would bring about an improvement in the quality of soybeans sold by rewarding farmers who sell clean beans. It would also help the grades perform their basic function of reflecting the market demand for oil and meal at all levels.

### Chinese Movement Up

The northbound movement of Chinese soybeans through the Suez Canal in the first 10 months of 1954 totaled about 342,000 short tons (11.4 million bushels), according to the Foreign Agricultural Service of the U. S. Department of Agriculture.

This quantity is slightly larger than shipments during January-October 1953.

SUEZ CANAL: Northbound movement of soybeans, January-October 1954 with comparisons (1,000 short tons, gross weight 1/)						
Average	1951		1952		Jan.-Oct. 1953*	
1933-37	1951	1952	1953*	1953*	1954*	1954*
1,237	551	219	353	336	342	342

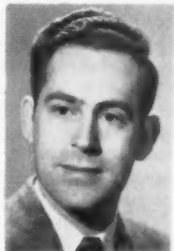
1/ Source data in 1,000 metric tons. \*Preliminary.

# Iowa Economist Sees Need for Changing Buying Practices Also

By **RICHARD PHILLIPS**

Department of Economics and Sociology,  
Iowa State College

**T**HE PRESENT official U. S. grain grading standards and the customary practices for trading soybeans do not encourage the individual producer to market high quality soybeans. Because he ordinarily receives no premium for soybeans with less than the maximum moisture and foreign material allowed in the trading grade, the individual producer is actually penalized for quality on these two factors.



Richard Phillips

As long as his soybeans do not contain enough moisture and foreign material for discount, water and bean stems or other foreign material in his beans are worth as much per pound on the market as the soybeans themselves. For example, with the trading grade based on 12 percent moisture and 2 percent foreign material, because of the extra weight, beans with these maximum limits will sell for an equivalent of about 8 cents per bushel more than the same soybeans with only 10 percent moisture and 1 percent foreign material.<sup>1</sup>

So under these conditions, the individual producer can increase his sales proceeds from his soybeans by not operating the cleaner on his combine and by combining when the dew is on or by taking other steps to insure delivery of 12 percent moisture and 2 percent foreign material with his beans.<sup>2</sup>

Assuming that many producers are aware of this and are willing to forego a certain pride in producing clean dry soybeans in the interest of their pocketbooks, the present system results in extra marketing costs in handling the extra water and extra foreign material through elevators and processing plants and in extra freight charges for shipping them from point to point.

The cause of all this can hardly be blamed on the soybean grading standards, however. The basic reason for it is the lack of price premium for soybeans with less moisture and/or less foreign material than the maximum permitted for the trading price. If, through a

system of premiums and discounts, the market faced by soybean producers adequately reflected the difference in value to soybean processors of different moisture and foreign material contents, the level of the standards for the trading grade would be unimportant.

If the standards were relatively high, the quoted price would be relatively high and discounts would be common on much of the crop in most years. If the standards were relatively low, the quoted price would be relatively low and premiums would be common on much of the crop in most years.

The reasons often advanced by processors and handlers for the lack of market price differentials on moisture and foreign material contents of less than the maximum permitted in the trading grade revolve largely around trading habit and custom. There can be no questioning of the fact that a soybean processor or the processing industry

can afford to pay more for soybeans with less moisture and/or foreign material than the maximum permitted in the trading grade.

Experience last fall has demonstrated that country handlers can feasibly determine the grade on each lot of soybeans received when they have a market incentive to do so. If the determination of soybean grade factors is so inexact that those who buy and sell soybeans cannot afford to risk determining the trading price on the basis of them, then our whole system of buying and selling soybeans on the basis of grade is certainly on shaky ground.

But, so long as the system of premiums were accurate, individually and collectively producers, handlers and processors alike would be equally well off in the two cases.

(1) Based on a soybean price of \$2.65 per bushel. The difference will be less than 8 cents when beans are selling for less and more than 8 cents when beans are selling for more than this. The high quality soybeans (10 percent moisture and 1 percent foreign material) will net the producer even less relatively when the trading grade is based on 14 percent moisture and 3 percent foreign material as it was prior to the 1953 crop. On the basis of \$2.65 per bushel, the difference would be the equivalent of nearly 16 cents per bushel in this case.

(2) This is strictly true only as far as the individual producer is concerned. If all producers were to do this, the market price for the trading grade will tend to be reduced to offset the extra moisture and foreign material coming in with the general run of the crop.

## Know oil content in 15 minutes!

**WRITE TODAY**

Steinlite electronic food and grain testers have been sold 'round the world for over 20 years.

For brochure and complete information on the Steinlite Fat and Oil Tester write today to  
Dept. SD-255  
Fred Stein Laboratories, Mfg.,  
Atchison, Kansas

Now you can make rapid, easy and accurate oil content determinations on all oil bearing products with the Steinlite Fat and Oil Tester. Know Oil content when you need to know it — with the Steinlite, non-technical personnel can test the oil content of Soybeans, Cottonseed, Flaxseed, Peanuts, and other oil seeds. Also cakes, and meals, meats and flakes. The Steinlite Fat and Oil Tester has been fully tested and proved and is being used by many leading oil processors.

**FAT & OIL - TESTER**





## A Report on Soybean Oil Meal—

# A Primary Source Of Amino Acids

By DR. H. L. WILCKE

Ralston Purina Co., St. Louis. From his talk before meeting of the American Feed Control Officials.

SOYBEAN oil meal as it is produced today is actually the ground, toasted soybean from which the oil has been extracted. From each bushel of soybeans weighing 60 pounds, approximately 11 pounds of oil and 48 pounds of soybean oil meal are obtained. This leaves a one pound or 1.67 percent shrink.

The soybean oil meal as produced under normal conditions today is made up of the entire bean, minus the oil, but with no other additives. While the composition of the various strains of soybeans will vary somewhat, the average percent of hulls on the beans and which are included in the meal is only about 4 percent. No attempt is made to adjust protein levels and none are necessary because of the fairly uniform protein content when the oil is extracted to a given level. Actually, the composition of the solvent process soybean oil meal, which makes

up more than 95 percent of the total soybean oil meal produced today, is approximately 45 percent protein, ½ to 1.3 percent fat, and 6 percent of fiber.

In table I we have listed the total amount of non-roughage feeds estimated to be needed for the various classes of livestock in the United States during the year 1953-54. It will be noted in this table that swine, poultry, and dairy cattle consumed by far the major part of the high protein feeds.

It will also be noted that the ratio of high protein feeds to the carbohydrate carrying feed is rather low. Because of this it is important to utilize our supplies of oil meals in the most efficient manner.

Actually our high protein feeds serve as a means of providing the amino acids lacking in the cereal

grains consumed by our farm animals. This is the primary function of soybean oil meal. It is not, generally speaking, a good source of some of the vitamin factors which we find in some of the animal protein supplements, but it does provide good quality protein.

In table II we have listed the lysine, tryptophane, and methionine content of several of the high protein supplements and in some of the grains. These are three of the essential amino acids which are most likely to be lacking in grain, and it will be noted that soybean oil meal is a relatively good source of lysine, although not as good as fish meal or meat scrap. Lysine is usually the first limiting amino acid deficiency in the cereal grains when they are used as sources of protein for young growing animals.

In table III we have listed the amino acid requirements of weaning pigs and young poultry. From this it may be seen that the requirements of these young animals for lysine, methionine, and tryptophane are higher than we would expect to find in the grains. For that reason they must be supplemented with

TABLE I

ESTIMATED FEED USE IN U. S. A. FOR CROP YEAR 1953-54 (Bulletin of American Feed Manufacturers Association)

Class of Livestock	Grains and Mill Feeds	High Protein Feeds	Tot. Non-Roughage Feeds
	1000 tons	1000 tons	1000 tons
Swine .....	45,636	3,112	48,748
Poultry .....	24,263	5,297	29,560
Dairy Cattle .....	19,106	3,775	22,881
Beef Cattle .....	16,750	2,534	19,284
Horses & Mules ..	2,358	.....	2,358
Sheep & Lambs....	623	201	824
Total .....	108,676	14,919	123,595

TABLE II

	Lysine	Tryptophane	Methionine	Total Protein
	%	%	%	%
Soybean Oil Meal .....	2.61	.53	.79	43
Cottonseed Meal .....	1.42	.47	.78	43
Linseed Meal .....	1.14	.55	.73	34
Peanut Oil Meal .....	1.28	.40	.57	43
Meat Scrap .....	2.80	.38	.94	55
Fish Meal Sardine....	5.04	.78	2.00	65
Corn Shelled .....	.22	.07	.27	9.4
Wheat .....	.36	.14	.17	13
Oats .....	.36	.13	.23	11
Sesame Oil Meal .....	1.20	.63	1.40	43
*Sunflower Seed Meal .....	2.00	.60	1.80	37
Gluten Meal .....	.84	.34	1.00	24
Skim Milk, dried .....	2.60	.46	1.00	33

\*Imported.

TABLE III

MINIMUM AMINO ACID REQUIREMENT FOR GROWTH OF YOUNG PIGS AND POULTRY, PERCENT IN RATION

	Pigs	Chicks	Poultis
Total Protein .....	22	20	28
Lysine .....	1.0	0.9	1.5
Methionine .....	.6	.8	.87
Tryptophane .....	.2	.2	.26

## Mitchell, Hutchins & Co.

—Future Brokers in Beans, Oil and Meal—

Members  
of all leading  
Commodity Exchanges

231 S. LaSalle St.  
Chicago 4, Ill.  
State 2-1700

high protein supplements such as the oil meals and animal protein supplements.

Since the supply of animal protein supplements is definitely limited, it is necessary that we obtain the bulk of our supplementary proteins from the oil meals in order that grains may be used efficiently and in order to support normal growth in young, growing animals.

#### Processing Needed

This function cannot be accomplished by the ground raw soybean, but the bean must be processed to make it the most effective protein supplement. This is not due to the fat content of the bean, but there are several factors involved in the improvement of the quality of the protein supplement of the soybean by heating.

First of all, there seems to be some factor in soybeans which functions as an inhibitor, making the lysine of the raw soybean unavailable to the pig and to the chick, particularly. Fortunately, this inhibiting factor is destroyed by heat, and when the soybean oil meal is toasted, this factor disappears and the young growing animal may utilize the protein satisfactorily.

It was the discovery that heating improved the quality of the protein in soybean oil meal that really accounted for the rapid growth of the soybean industry in this country. Since that discovery, the soybean industry has been working constantly to discover the best combination of heat, moisture, and time which will produce the best quality meal and at the same time avoid overheating in the product that is produced.

When soybean oil meal is overheated certain of the amino acids, particularly lysine and probably methionine, become unavailable to the young, growing animal. Therefore, there is an optimum method of processing, below which an inhibiting factor operates, and above which the amino acids are not available to the young, growing animal.

Much work has been done in attempting to devise rapid chemical tests which will evaluate the biological value of soybean oil meals. Unfortunately, no such simple test has been developed as of this date. One of the tests that is used most frequently, and which receives the most publicity, is the modified Caskey-Knapp urease test.

#### Urease Test

In the raw soybean there is an enzyme, urease, which is inactivated by the application of heat. Therefore, a measure of the urease content of the resulting meal provides some measure of the heat that has

been applied to that soybean oil meal in processing.

It may be seen readily that this test breaks down when meals are overheated because when all of the urease has been inactivated, obviously it can no longer serve to measure the amount of heat that has been applied beyond the point of destruction of the total amount of urease. Therefore, the urease test as used in plant control operations today in many plants is a means of measuring the degree of processing and evaluating the point at which the heating has been completed.

Unfortunately, there is not a high degree of correlation between the urease readings and the biological

value of the soybean oil meal produced. Within limits, it serves its purpose but its functions are limited.

There is hardly any product on the market which does not have problems of one type or another. Every industry must recognize its problems and do its best to correct them. I feel that the soybean industry has done a very fine job in this respect. We must have continued vigilance and efforts to improve the product in order that we may meet the requirements of the vastly increased numbers of livestock and poultry necessary to produce the foods for our growing population in this country.

#### Louis Groh & Son Storage



**VIRGINIA FACILITIES.** The elevator is part of the facilities of Louis Groh & Son, Claybank, Va., seedsmen. The firm has recently added 70,000 bushels capacity to make a total of 200,000 bushels. Groh also has flat-type bulk and bag storage facilities.

#### COMPLETE PLANTS AND UNITS

### extraction and processing of vegetable oils

developers of the Rotocel, installed capacity exceeds 1,000,000 tons per year

**BLAW-KNOX COMPANY** chemical plant division

180 N. Wabash Ave., Chicago 1, Ill.

Pittsburgh 30 • Tulsa 1 • New York 17 • Philadelphia 3 • Birmingham 3  
Washington 5, D.C. • San Francisco 5

## West Germany Continues to Offer Large Market for Fats and Oils

**WESTERN GERMANY** continues to be a large and expanding market for fats, oils, and oilseeds, including those from the United States, reports William F. Doering, agricultural economist in the Office of the U. S. High Commissioner for Germany at Bonn.

In 1953 the total net imports of oils and oilseeds were about 1.5 million short tons, an increase of 25 percent over 1952.

The United States' share of the West German market in 1953 remained about 21 percent, though much of the business was via third countries, reports Doering.

The principal U. S. commodities shipped were soybeans plus some soybean oil, lard and fat back and, for industrial use, inedible tallow and fish oils.

Imports from the United States are restricted by the government's policy of:

1—Buying from soft-currency debtors where possible to conserve dollars.

2—Insisting on oilseeds rather than oil.

Although a few industrial fat-and-oil items are on the dollar-area liberalization list of last February, U. S. edible fats and oils can enter Western Germany only via transit, barter or under U. S. aid or other programs. In practice, Western Germany purchases those American items that are either priced so low

as to absorb the added costs of switch or barter transactions, or are not obtainable in sufficient quantity elsewhere.

Western Germany's oilseed milling industry, of nearly 2 million short tons annual processing capacity, is almost entirely dependent on imports. For this reason, the country is vitally interested in obtaining a large proportion of its vegetable oil in the form of oilseeds.

### Rather Buy From U. S.

Trade circles would rather purchase direct from the United States, which they regard as one of their best and often cheapest sources. They favor an extension of the dollar liberalization list to include soybeans, soybean oil, and other fats and oils. Unfortunately, as long as Western Germany's European Payments Union (EPU) trade balance remains unchanged, there is small chance of this taking place.

In 1953 Germany's oilseed imports increased almost 38 percent from 1952. At the same time, imports of vegetable oils decreased by almost 7 percent. This increase in seed imports enabled the country's processing industry to operate at around 40 percent capacity as compared with only 33 percent in 1952.

Such a trend has helped to stimulate business activity in Western Germany. Much of the imported seeds went into the production of

edible oils for domestic consumption. But more than 130,000 tons of oil were processed for re-export on a contract basis. An additional 22,000 tons was processed for domestic industrial use.

In summary, the fats and oils import situation in Western Germany in 1953 was influenced largely by the following factors:

1—Germany's continuously growing creditor position within the European Payments Union. This increased the emphasis on purchases of oils and oil-bearing materials from the Organization of European Economic Cooperation (OEEC) countries.

2—The government's unchanged policy of seeking to build up dollar reserves, which for the most part forced imports from the United States into triangular and barter transactions.

3—The financial recovery of the import trade and the oil milling industry from the heavy financial losses suffered in 1952. This re-emphasized the preference for seeds over oils.

4—The further expansion of trade and commodity agreements with respect to fats and oils.

Western Germany consumed approximately 1.3 million short tons of edible oils in 1953. Of this quantity only 46 percent, or 600,000 tons, was obtained from domestic production. Actually 91 percent of the ingredients used in margarine, shortening and table oils were from imports.

### Margarine Production

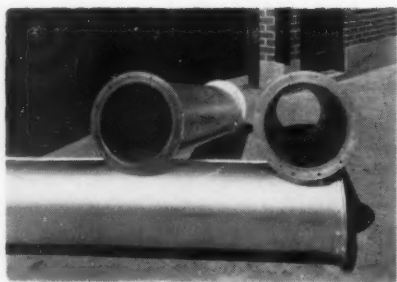
Production of margarine in Western Germany has been increasing in recent years, keeping abreast of the rising trend in consumption. Margarine has continued to strengthen its position as the dominant item in the retail fat market. Strong competition among producers resulted in further quality improvements, price savings, and large-scale advertising, and a striking shift in sales from lower and medium-priced brands to the "super" types.

Vegetable shortening and table oil continued to experience a quiet but stable market in 1953. Shortening experienced some competition from the much cheaper low grade margarine.

For the complete report see, "Western Germany Continues Large Imports of Fats and Oils," Foreign Agriculture Circular, Dec. 21, 1954, Foreign Agricultural Service, U. S. Department of Agriculture, Washington 25, D. C.

Please mention the Soybean Digest when writing to our advertisers.

## Cut Abrasion Costs 50%



### On Your Bean Handling Equipment With Rubber Protected Steel

Rubber yields under impact and abrasion — absorbs the energy of particles which quickly wear away unprotected steel.

Your CHUTES • HOPPERS • ELBOWS • TROUGHS  
SCREW CONVEYORS • TANKS  
Can Be FABRICATED FROM Rubber Faced Steel Plate

Write direct to:

**Western Rubber Products Co.**

320 SOUTH GRAND AVENUE, ST. LOUIS 3, MISSOURI



## PUBLICATIONS

### Sees Freer Trade as Key to Exports

**FREER TRADE.** The phenomenal expansion of the soybean industry in recent years has been due at least in part to protective tariffs. At present the following tariffs are in effect on soybeans and soybean products:

Soybeans, \$1.20 per bushel.

Soybean oil, 3c per pound, but not less than 22½ percent ad valorem.

Soybean oil meal, 1½/100c per pound.

What would be the effect of freer trade, as advocated by many people at the present time, on soybean producers?

Koppa Venkataramaniah SriRam has attempted to answer this question in his doctoral thesis submitted at Purdue University. He points out that no nation advocates a policy of complete free trade, but there is a considerable movement toward freer trade.

SriRam points out that export demand for American soybeans has had an important influence on the price, production and consumption of soybeans in this country. He says any analysis of freer trade without recognizing the major problem of the shortage of U. S. dollars abroad appears to be futile. There would be some shortage of dollars even if completely free trade existed due to the tremendous productivity in the United States.

Freer trade will in all probability intensify the competition of all other fats and oils and oil bearing materials with soybeans in domestic markets, and so result in a decreased demand for U. S. soybeans at home, and a downward pressure on soybean prices.

But it will at the same time mean a greater movement of U. S. soybeans into foreign markets, particularly Western Europe and Japan, and so result in reduced supplies in the United States, SriRam believes. This will eventually lead to higher prices and increased soybean production.

He says the U. S. soybean producer would benefit in two ways by freer trade:

1—Increased exports and a higher price abroad for his soybeans.

2—Lower prices for imported goods which will raise his standard of living.

A movement toward freer trade that will expand employment and incomes in importing countries is the only way in which the United States can keep up the present volume of export trade, SriRam says. And it

must not be forgotten that the present prosperity of the soybean producer is based in part on a good export market.

**THE POSSIBLE EFFECT OF FREER TRADE ON THE UNITED STATES SOYBEAN PRODUCER.** A thesis submitted to the Purdue University faculty, by Koppa Venkataramaniah SriRam. January 1955.

**WEEDS.** Some 200 weeds commonly found in the North Central states of the United States are fully described in a new circular published by Illinois Agricultural Experiment Station and available at the experiment stations of Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota and Wisconsin.

The publication should be of value to anyone interested in accurate weed identification and description. It is the result of cooperation of staff members of the various experiment stations and the U. S. Department of Agriculture.

**WEEDS OF THE NORTH CENTRAL STATES.** North Central Regional Publication No. 36. Circular 718. 240 pages. 75 cents. Obtain from your state experiment station.

**COSTS.** The cost of growing soybeans in the Coastal Plain area of South Carolina is \$21.03 per acre on tractor farms and \$27.25 on mule farms, according to a study by Clemson Agricultural College.

The big cost items on the tractor farms were fertilizer, labor, and power. Seed cost \$2.84 per acre. Sacks cost \$2.40 per acre. Repairs and depreciation on the tractors and machines varied with age, care and use.

Based on average yields on these farms of 16.1 bushels per acre and a price of \$3 per bushel, average net return to land and management was \$27.27 on tractor farms and \$21.05 on mule farms. If a rate had been allowed for the cost of management and rent to land, this return of course would not have been as great.

Farmers on tractor farms cooperating in the study took 5.8 tractor hours and 7.8 man hours to produce an acre of soybeans.

Any large increase in net returns

apparently will have to come from higher yields rather than lower costs. But such an improvement should not be difficult. The average yield of soybeans in South Carolina in 1951 was 12.5 bushels per acre. This compares with experimental results that indicate yields of 35 bushels per acre could be expected on many farms if improved practices were used. Average yield on the 27 farms studied was 16.1 bushels per acre.

The 35-bushel yield at the 1951 price of \$3 per bushel would result

## GRAIN TRADING

The National Grain Trader, published in the heart of the grain belt and center of commodity trading, gives specific advice on soybean markets. Advice also covers wheat, corn, rye, oats, lard, soybean oil and soybean meal. All trades which are opened are specifically closed out at a price. No profits are claimed which are not actually taken by clients.

The advice in National Grain Trader is written by a professional trader who has complete information sources. Economic analysis, trade information, charts and technical methods are used to obtain profitable results for subscribers. The 1954 profit record showing all trades will be sent to new subscribers who answer this ad.

The advisory letter is published twice a week, or more. It is air mailed free of charge to all points more than 200 miles from Chicago.

With your trial subscription at this time you receive the booklet "Principles of Profitable Grain Trading." You also get a seasonal trend chart of a grain which tends to rise sharply at this time of the year. Also, your subscription includes 4 issues of the advisory bulletin.

New Subscribers Only  
Send \$1 now for offer CD-7

**NATIONAL GRAIN TRADER**

35 E. Wacker Drive, Chicago 1, Ill.

**SOYBEANS: ESTIMATED COSTS AND RETURNS PER ACRE WITH COMPARISON OF USUAL AND RECOMMENDED PRACTICES USING TRACTOR POWER, COASTAL PLAIN AREAS OF SOUTH CAROLINA 1951**

Item	Unit	Usual practices			Recommended practices		
		Quantity	Value		Quantity	Value	
			Per unit Dollars	Per acre Dollars		Per unit Dollars	Per acre Dollars
Receipts .....	Bu.	(1) 16.1	(2) 3.00	48.30	35.0	3.00	105.00
Expenses .....							
Fertilizer .....	Cwt.	2.0	2.035	4.07	5.0	(3) 2.43	12.15
Seed .....	Lb.	4.3	(4) .096	2.84	(5) 60	.066	3.96
Machines .....				2.54			2.54
Tractor power ..	Hour	5.8	.66	3.83	6.3	.66	4.16
Tractor driver ..	Hour	5.8	.75	4.35	6.3	.75	4.73
Other labor .....	Hour	2.0	.50	1.00	2.5	.50	1.25
Sacks .....	2 bu. each	8	.30	2.40	17.5	.30	5.25
Total expenses ..				21.03			34.04
Returns to land and management .....				27.27			70.96

(1) Average yield per acre on 27 farms studied. (2) Prices received by farmers for soybeans, 1951. Source: Agricultural Prices, BAE, USDA, 1951. (3) 3-12-12 fertilizer which is the recommended fertilizer for soybeans costs \$48.60 per ton compared to \$40.70 per ton for 3-9-9, the fertilizer most commonly used on 27 farms studied. (4) Estimated price paid by farmers for seed. (5) Varies with size of seed.



Harold L. Streetman

in a net return to land and management of \$70.96 per acre on tractor farms as compared to the \$27.27 actually received. It is common practice in South Carolina to grow soybeans after small grain which delays planting until late June. For highest yields of beans it is better to plant soybeans in early spring just after cotton and corn.

However, many farmers feel that greater total profits can be realized by a system of double cropping and this was common practice for farmers in the study. This practice may reduce the yield of beans but it usually increases the yield of the succeeding crop.

**COSTS AND PRACTICES IN PRODUCING SOYBEANS IN SOUTH CAROLINA.** By Harold L. Streetman. Bulletin 412. Clemson Agricultural College, Clemson, S. C.

**WASHINGTON.** Thirty to 40 bushels per acre of soybeans can be

produced under irrigation in central Washington.

But since yields of dry beans of up to 50 bushels an acre and corn yields of 100 bushels can be obtained on the same land, soybeans can hardly compete with these crops for the land in the area.

Experiment station workers suggest soybeans might compare more favorably if ways can be found to reduce costs of production or if price prospects for other crops seem less favorable.

Varieties recommended are Capital, Kabott, Flambeau, Montreal Manchu, Goldsoy, Ottawa Mandarin, Pridesoy and Hokein.

Use of 40 pounds of nitrogen per acre following leguminous crops and 80 pounds per acre following row crops is recommended. Also, 40 to 50 pounds of P.O. per acre is recommended.

Workers suggest that producers make sure of a market for soybeans before planting them in Washington, as processors may not be interested unless they can buy in volume.

**HOW ABOUT SOYBEANS FOR THE COLUMBIA BASIN?** By C. E. Nelson, A. H. Harrington and Jean C. Gifford. Circular 250. State College of Washington, Pullman, Wash.

**ALABAMA.** Soybeans are becoming an important cash crop in Alabama. For several years there has been a large acreage in Baldwin, Escambia, and Mobile Counties, and considerable acreage in Jackson County. Several other counties have started soybean production in recent years.

The crop fits well into rotation with early truck crops, winter grazing, winter legumes harvested for seed, and small grains. On adapted soils, yields justify its use as a main cash crop. Alabama farmers made an estimated yield of 20 bushels per acre in 1953.

Recommended varieties for Alabama are Ogden, Roanoke, Dortch-soy and Jackson.

**SOYBEANS FOR OIL.** By J. C. Lowery. Circular 467. Extension Service, Alabama Polytechnic Institute, Auburn, Ala.

## LETTERS

### Favors Lower F. M.

TO THE EDITOR:

I believe lowering the foreign material allowable in each grade of market soybeans is absolutely essential to put a premium on high quality soybeans, improve our domestic and foreign demand in competition with foreign sources, and increase the returns to the producer.

Last year we reclaimed market beans for local owners. It's difficult to leave 3 percent foreign material in. Certainly this does not represent a quality product. I would favor 1 percent allowable foreign material for all grades as a standard.

It's now smart business for the producer to leave weeds and dirt in, and for the elevators and exporters to add the allowable foreign material before resale at the expense of the producer. Our soybean

## Crude and Refined Vegetable Oils—Soy Oil, Corn Oil, Cottonseed Oil

Daily Market Letters to Our Customers Supplement Our Personal Service  
PHONE, WIRE, OR WRITE,

## ROESLING, MONROE & CO.

4140 Bd. of Trade Bldg., Chicago 4, Ill. Ph.: Harrison 7-5244 **BROKERS**

GEO.K. DAHLIN

CARL H. SMITH

HUGH B. ELLSWORTH

Member National Fats and Oils Brokers' Association

market is highly dependent on foreign trade. Higher quality soybeans are absolutely necessary if we are to capture and hold a larger share of the export market.—Willard Latham, chairman, Secretary Benson's Advisory Committee on Flax and Soybeans, Latham Seed Farm, Alexandria, Iowa.

## Cost of Farm Drying

TO THE EDITOR:

I have read with interest the article on the farm soybean drying operation of the Wrenn Brothers at Momence, Ill., in your December 1954 issue.

I have some comments to make on the costs of drying the 3,500 bushels of beans which they have quoted as an example.

The inference is that they gained over \$500 in market price by drying the 3,500 bushels of beans from 16 percent moisture to less than 13 percent moisture. A further consideration of the economics at hand yields somewhat the following results:

Basis	—3,500 bu. beans
Gain	—3,500 bu. x 15c = \$525
Cost	—drying costs = 2.25c/bu. x 3,500 bu. = \$79
Shrinkage	—4% x 3,500 bu. x \$2.61/ bu. = \$366
Total	—\$445

Thus, the actual profit is equal to \$525 minus \$445 cost, or \$80 on the 3,500 bushels of beans. This amounts to some net profit of 2.25c per bushel minus the depreciation on the equipment and the extra cost and supervision of operating the drying equipment over and above that of hauling the beans directly from the combine in the field to the elevator. Thus the question is whether the Wrenn Brothers feel that \$80 profit on the operation necessary to dry these 3,500 bushels of beans is warranted.

Certainly drying soybeans is a necessity if it is planned to store them in bins on the farm, but the economics of drying beans if you are going to sell them immediately are somewhat dubious and in the case quoted are somewhat misleading.—Noel W. Myers, Decatur, Ill.

Mr. Myers' figures on shrinkage are apparently correct as based on the story. The Wrenn Brothers believe that they carried on a wise and profitable operation as they were able to market their batch of beans with a uniform quality on which the price was firm. But it appears that the major value of drying soybeans on the farm lies in creating a storable product rather than a higher value crop at the time the storing is done.—EDITOR.

# SPERGON<sup>®</sup>

## SEED PROTECTANT

use  
the  
best!



"3.1 bu. per acre increase...17.6% increase in plant weight... 53.5% increase in bean weight"...Reported Spergon successes from preventing damping-off, seed decay and other fungus diseases.

You can plant less seed per acre when seed is treated with Spergon. Spergon lubricates that seed for less seed breakage and easier planting. It works very effectively with legume inoculants and is non-hazardous. More bushels per acre...more dollars per acre.

Order Spergon from your local supplier today. Write, wire or phone us if unable to locate immediate source of supply.



## Naugatuck Chemical

Division of United States Rubber Company  
Naugatuck, Connecticut

producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap, Duraset





## GRITS and FLAKES . . . from the World of Soy

### Pacific Operation

Continuing its expansion program begun at the termination of World War II, **Screw Conveyor Corp.**, Hammond, Ind., announced the activation of Screw Conveyor Pacific Corp., on Jan. 1 with headquarters at Santa Clara, Calif. The corporation formed in 1952 is a wholly-owned subsidiary. W. E. (Earl) Forster has been appointed sales manager of Screw Conveyor Pacific Corp. He was formerly president of Forster Manufacturing Co. of Wichita, Kans., and of late headed his own firm, W. E. Forster Co. at Sacramento, Calif.



W. E. Forster

### Allied Mills Promotes



Chester M. Kessler



John I. Hall

Two promotions in the sales administration of **Allied Mills, Inc.**, Chicago, have been announced.

Chester M. Kessler, who has been director of sales training since 1948, has been promoted to assistant general sales manager, and John I. Hall, now assistant treasurer, succeeds Mr. Kessler as director of sales training.

Kessler, who joined Allied Mills in 1940, has appeared on the programs of many hatchery and feed

association meetings during recent years.

Mr. Hall entered the feed business in 1947 with another major feed company, joined Allied Mills in 1953. He will continue to be located at Libertyville, Ill., headquarters for the sales training division.

### ADM Chairman Passes

Samuel Mairs, chairman of the board of directors at **Archer-Daniels-Midland Co.**, Minneapolis, died Jan. 17 in Jamaica. His death was the result of coronary thrombosis.

Mr. Mairs held the distinction of having been employed with Archer-Daniels - Midland Co. or one of its predecessors longer than any other one person. He began as a bookkeeper for the Daniels Linseed Co. in 1903.

In 1923 when Archer - Daniels - Midland Co. was incorporated, he was elected a director and secretary, and a year later a vice president of the company. He was elected executive vice president in 1933, and held this position until 1947 when he succeeded the late Shreve Archer as chairman of the board of directors. He was also a member of the company's executive committee.



Samuel Mairs

### Chicago Bank Merger

**Chicago National Bank**, 120 S. LaSalle St., and **Liberty National Bank of Chicago**, 3158 West Roosevelt Road, will combine operations with transfer of Liberty National's operations and personnel to Chicago National Jan. 17.

Chicago National was organized in 1948 as a consolidation of the Chicago Terminal National Bank and the Industrial National Bank of

Chicago, and has grown from \$61.7 million in total resources to \$120 million as of Nov. 30, 1954.

Liberty National, which had \$66.5 million in resources Nov. 30, operates in all fields of commercial and personal banking and is widely known as an important factor in the food business, having accounts from many processors and allied businesses. Victor Fay and Harry Lindhorst have serviced these accounts for Liberty and will continue to do so at Chicago National as vice presidents.

### Margarine Group Elects

Stephen J. Bartush, president of Shedd-Bartush Foods, Inc., Detroit, has been named chairman of the board of directors of the **National Association of Margarine Manufacturers**, according to an announcement by S. F. Riepma, president. Bartush heads one of the country's largest margarine manufacturing companies.

Elected to two-year terms as directors were: William Ostermann, manager of the general margarine department of Swift & Co., Chicago; and Howard E. Kent, Jr., president Kent Products, Inc., Kansas City, Mo.



Stephen J. Bartush

Robert McDonald, merchandising manager Good Luck division, Lever Bros. Co., New York; and Kenneth Hart, assistant general sales manager, Kraft Foods Co., Chicago, will complete two-years terms in 1955.

Operations of the Gibson City, Ill., plant of **Central Soya Co., Inc.**, were featured in a recent issue of the Champaign-Urbana (Ill.) Courier.

## WILBUR-ELLIS COMPANY

Brokers of Soybean Oil and Proteins

COMPLETE DOMESTIC AND FOREIGN COVERAGE

105 West Adams St., Chicago, Ill.

Telephone: ANDOVER 3-7107

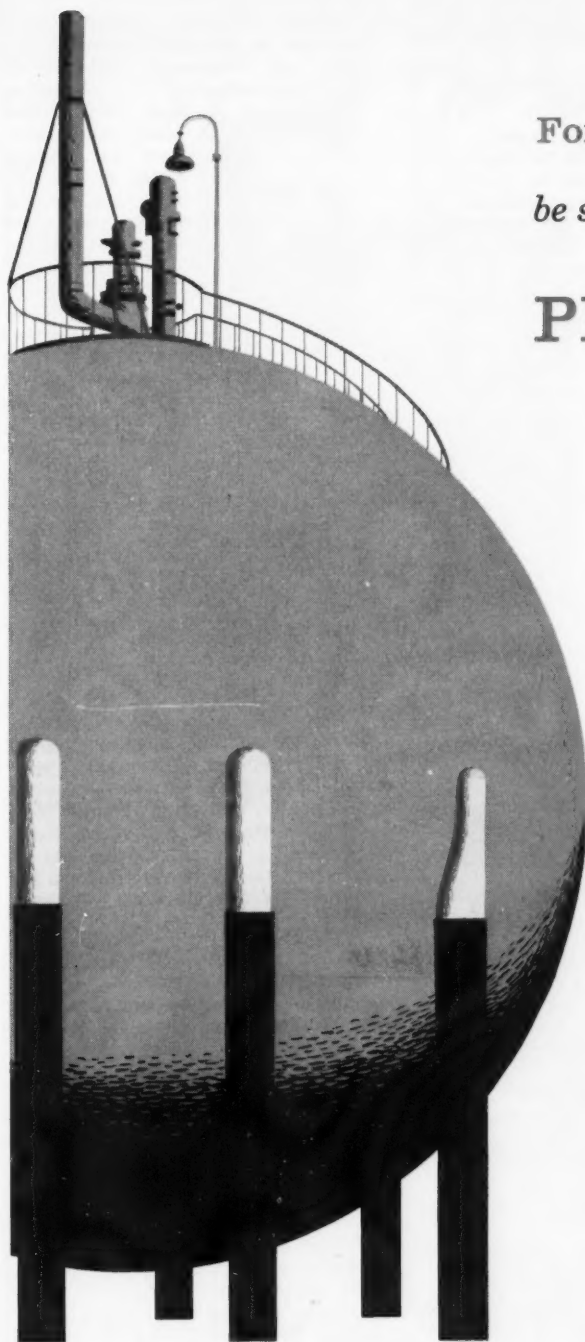
New York

San Francisco

Buffalo

Los Angeles

Seattle

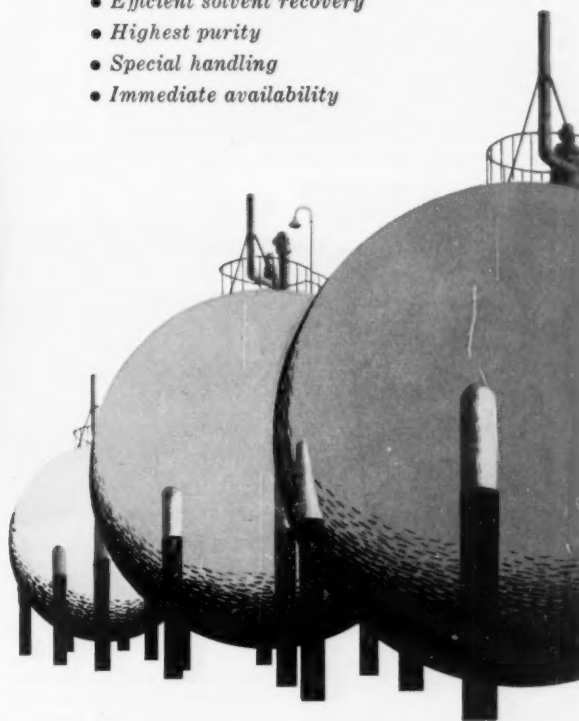


For more economical processing  
*be sure you specify*

## PENOLA HEXANE

**Penola Hexane assures you  
high efficiency with  
these 7 important features:**

- *High oil recovery*
- *Low vapor pressure*
- *Narrow boiling range*
- *Efficient solvent recovery*
- *Highest purity*
- *Special handling*
- *Immediate availability*



**For your processing needs** be sure to specify Penola Hexane for the most efficient and economical performance.

**For expert technical assistance** and any technical data you require regarding *your* processing operations, be sure to call the Penola Office nearest you.



**Penola Oil Company** *New York • Detroit • Chicago*

## Borden Dept. Head

Dr. J. F. Muller has been named general manager of the prescription products department of the **Borden Co.'s** special products division. He succeeds Harry McNeilly who has resigned.



J. F. Muller

Dr. Muller, a chemist and bacteriologist, has been with the prescription products department since 1941. He is the discoverer of Mull-Soy, a soy-base food for children and adults who are allergic to cow's milk. Before joining Borden's he was owner and director of the Muller Laboratories which he founded in Baltimore.

## Fertilizer Groups Merge

Consolidation of the American Plant Food Council, Inc., and the National Fertilizer Association was approved by the members of the Council at a special meeting, in the Mayflower Hotel in Washington, D. C., Dec. 1.

The favorable vote by the Council

membership constituted the final action in bringing together the two national trade associations which will become the **National Plant Food Institute** on July 1, 1955. NFA members approved the consolidation at Hollywood, Fla., on Nov. 11.

A 32-year sales career with **American Cyanamid Co.** was ended with the retirement of Horace V. Cory from his post as assistant general manager of the agricultural chemicals division. He will remain available to the company as a consultant.

George K. Whyte, branch manager of **Chase Bag Co.** at St. Louis, was elected a vice president of the Western Golf Association at its annual meeting in December.

The **J. C. Corrigan Co., Inc.**, Boston, Mass., engineer manufacturer and erector of conveying systems, announces the opening of a sales office in New York City at 420 Lexington Ave. Gilbert Lavoie, who has been associated with the Boston office, has been appointed as sales engineer.

**T & J Feed and Supply**, Floral, Ark., recently celebrated the completion of its new custom grinding and mixing feed plant. Owners are F. W. Tharp and R. L. Jefford.

## Dannen Vice President

George O. Lines, former general manager of the animal nutrition division of **Commercial Solvents** of New York City, has been selected as



George O. Lines

vice president and production manager of **Dannen Mills** of St. Joseph, Mo. He was with **Commercial Solvents** 25 years. Mr. Lines has had wide experience in the production of various antibiotic and vitamin feed supplements. He will be in charge of all soybean processing and feed manufacture as well as operations and expansion at Dannen's.

E. B. Roberts, manager of the Peoria paper mill and multiwall bag plant of **Bemis Bro. Bag Co.** until his retirement in 1949, died Jan. 9 following an extended period of ill health. He supervised the building of the Bemis-Peoria plant in 1912-13 and was manager there from the beginning until his retirement.

G. A. Kent, president of **Kent Feeds**, Muscatine, Iowa, announces the appointment of Kenneth Appleby, Cedar Falls, Iowa, as turkey and poultry consultant for the north central Iowa area; and Keith Jones, Winfield, Iowa, as salesman for an area covering southeastern Iowa and part of western Illinois.

The **Ralston Purina Co.**, St. Louis, Mo., will build a new feed mill at Springdale, Ark. The new mill will have a capacity of about 75,000 tons of broiler and turkey feeds annually.

Sanford R. Bell has been promoted to the position of plant engineer at **International Minerals & Chemical Corp.'s** Bonnie chemical plant near Bartow, Fla. He joined International's phosphate chemicals division last April and replaces Robert V. Safford who recently moved up to assistant manager in charge of engineering at the Bonnie plant.

William S. Snyder has been appointed assistant general sales manager of **International Paper Co.** He joined International in 1941 and was appointed manager of the container division in 1949. He will concentrate on sales and other aspects of the company's converted products including multiwall shipping sacks.

"Soybeans—Agricultural Miracle," is a series of articles currently being published in the Board of Trade News, organ of the **Chicago Board of Trade**.



**MODEL "R" HYTROL**

**SEEDBUERO HANDY ALUMINUM CONVEYOR**

**7 SIZES 10-21 Ft.**

**Completely Portable . . . Set it where you need it!**

**CHECK THESE ADVANTAGES**

- Light Weight sturdy construction
- No Lifting Required—loading and comes down to floor
- Reversible at flip of switch
- Folds in Half for easy storage
- Handles Bags, Boxes, Cartons up, down or horizontally

Take it along with you in your truck—use it in a stairway or in a box car. The Seedbuero Model "R", lightweight and handy, Aluminum Hytrol Conveyor is built for complete portability, easy handling and a long life of efficient, low-cost service. Attachments available include hydraulically operated adjustable undercarriage and a gravity feeder section. Be sure to write for literature and prices.

"World's Leading Supplier of Grain Testing Equipment for Over 40 Years"

**SEEDBUERO**

(SEED TRADE REPORTING BUREAU)

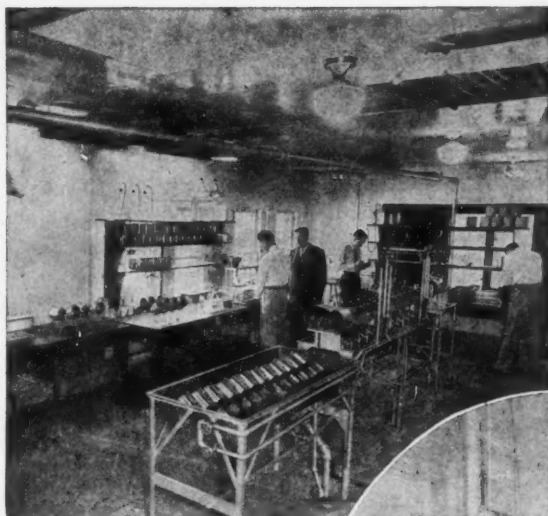
**EQUIPMENT COMPANY**

Dept. SD2 618 W. Jackson Blvd., Chicago 6, Ill.

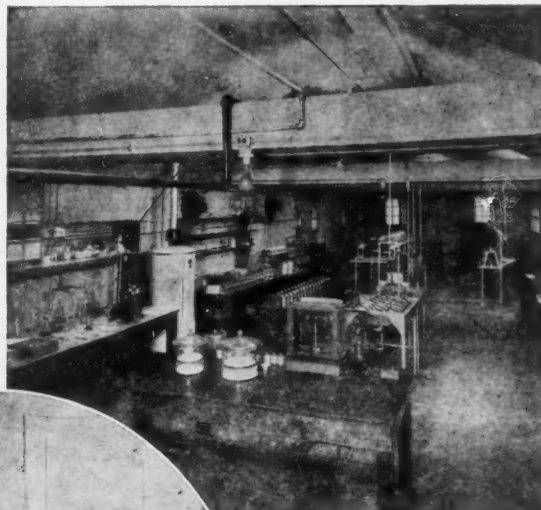




# Serving The Soybean Industry



The Chicago, Ill., laboratory is equipped with the most modern equipment for refining soybean oils.



The Des Moines, Iowa, laboratory with all the latest equipment for refining oils.



The Oil Refining Department at the Memphis, Tenn., laboratory, with a capacity of 150 refinings daily.

# 7

Chemical Laboratories  
to serve you.

- Chicago, Ill.  
9 So. Clinton St. Bldg.
- Des Moines, Iowa
- Memphis, Tenn.
- Little Rock, Ark.
- Blytheville, Ark.
- Cairo, Ill.
- Clarksdale, Miss.

## WOODSON-TENENT LABORATORIES

*Official Chemists for the Chicago Board of Trade*

MAIN OFFICES: 265 SOUTH FRONT ST.

MEMPHIS, TENN.

SPECIALIZING IN SOYBEAN OILS — CAKE — MEALS — FEEDS

*"Over ONE BILLION dollars worth of products analyzed since 1935."*

# "Looks like another good SOYBEAN YEAR!"

**NEXT YEAR** *will be a good year for soybeans, too.  
And so will the year after that.*

Back in 1929, when Archer-Daniels-Midland opened its first soybean processing plant, the nation's entire soybean crop amounted to only 8.7 million bushels.

Last fall, America's farmers harvested over 342 million bushels!

Amazing?

Certainly . . . for this spectacular increase could not have occurred if the demand for soybeans had not kept pace. And Archer-Daniels-Midland has played an important part in building this demand.

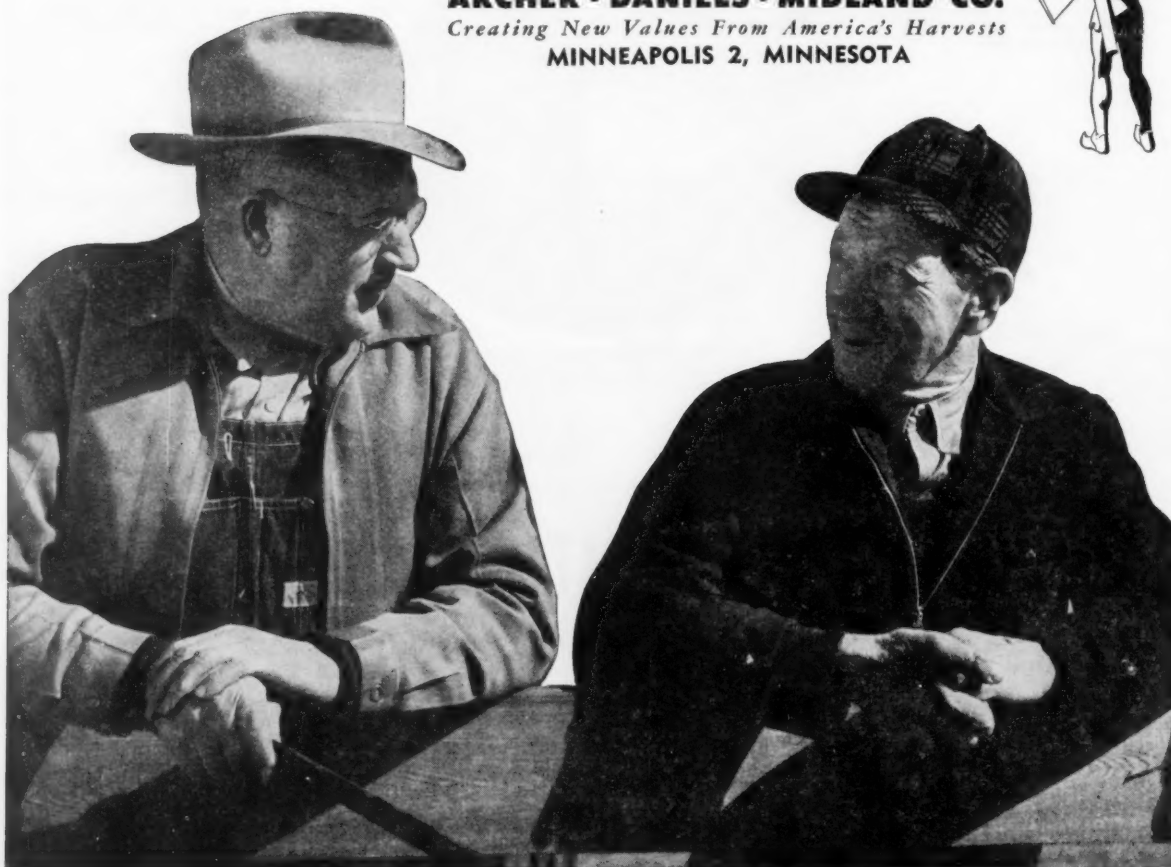
Scores of new products have been created in ADM's famous research laboratories, processed at a lower cost in ADM's giant soybean plants, and distributed through the skill of ADM's aggressive sales and marketing organization.

This is how markets are built . . . and this is how they continue to grow. This year . . . this month . . . this week . . . exciting *new* soya products are being tested and perfected by ADM scientists.

Yes, this will be a good year for soybeans . . . and we at ADM predict that many more good soybean years lie ahead.



**ARCHER • DANIELS • MIDLAND CO.**  
*Creating New Values From America's Harvests*  
**MINNEAPOLIS 2, MINNESOTA**



## NEW PRODUCTS and SERVICES

**FEED BLENDER.** Barnard & Leas Mfg. Co., Inc., has announced the addition of a new feed processing unit called the B & L Portable Formula Blender. This machine is solving the problems of the feed manufacturer who has been unable to take advantage of the sales



demand for formula feeds using the farmer's grain and roughages.

The outfit is a complete feed plant with liquid ingredient tanks and bulk concentrate bins, both

with regulators to blend at any desired rate of flow.

The B & L Portable Formula Blender operates as two basic processes:

1—As a batch mixing plant processing up to two tons of formula feed per batch and

2—As a continuous blending plant which can manufacture formula feed at the rate of up to 15 tons per hour.

For further information write Soybean Digest 2a, Hudson, Iowa.

**BAG SEAM.** The perfection of a welded side seam, possessing unusual strength and uniformity, for polyethylene bags is announced by Bemis Bro. Bag Co. This "Fine-Weld" construction, as it is designated by the company, produces a thin, beaded seam that is actually stronger than the polyethylene film itself.

The film will rupture before the seam will pull apart. The only possible way to tear the seam is to shear the film along the seam itself, which is stress not normally encountered in packing and handling.

Fine-Weld permits the manufacture of seamless bottom polyethylene bags that provide full front and back surfaces for brand printing, uninterrupted by center seams. Unprinted areas provide complete, unmarred visibility of the product packed, from the front, back or bottom of the bag, making it an ideal display package.

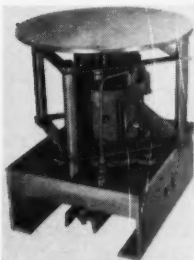
For further information write Soybean Digest 2b, Hudson, Iowa.

**ABRASION - RESISTANT EQUIPMENT.** Western Rubber Products Co. now offers complete facilities for fabricating all types of bean-handling equipment of abrasion resistant rubber backed by sheet steel.

Chutes, screw troughs, hoppers, tanks, dust collectors and preformed liner fabricated from this material are lasting up to eight times as long as standard handling equipment.

For further information write Soybean Digest 2d, Hudson, Iowa.

**SCALE.** A platform scale utilizing strain gauge load cells and pneumatic tare weights permits inexpensive and accurate net weight measurement. This W/C electric weighing scale is adaptable for either batch weighing or continuous process control.



Its high accuracy is a result of a unique design of weighing structure using the advanced techniques of flexural pivots to eliminate effects due to off-center loading.

For further information write Soybean Digest 2c, Hudson, Iowa.

## MARIANNA SALES COMPANY

MEMPHIS 1, TENN.

*Dealers in*  
**Soybean and Cottonseed  
Products**

*Brokers in*  
**Soybean and Cottonseed  
Meal Futures**

*Members*

Memphis Board of Trade

American Feed Manufacturers Association

Chicago Board of Trade

Tel. 37-8585-89

## JONES-HETTELSATER CONSTRUCTION CO.

**34 YEARS as  
Designers and Builders**



**FLOUR MILLS  
ELEVATORS  
FEED & SOYBEAN  
PLANTS**



1911 Baltimore Ave.  
KANSAS CITY 8, MISSOURI



## WASHINGTON DIGEST

### May Lower 1955 Support to \$2 Bu.

**SUPPORT.** The Department of Agriculture is considering a \$2 a bushel price support for soybeans produced in 1955, compared with the \$2.22 a bushel level for the 1954 crop.

The new support level, if adopted as appears likely, reflects approximately 70 percent of the slightly higher parity for soybeans that took effect Jan. 1.

As a part of the regular price support operation for soybeans this year, USDA also is considering use of a guarantee to purchase soybean oil from producers in the event buying is needed.

Officials at the same time have discussed dropping the "package" price support program on cottonseed this year—a move which industry has wanted for some time.

Final details of the new soybean support program were being worked out at press time. The plans have been discussed with industry representatives, but final decisions won't come until checks are made with congressional leaders.

Flaxseed price support also is being decided now, and the intent is to announce all the oilseed programs at the same time.

**LOANS.** A surprising volume of soybeans had gone under price support during the first quarter of the 1954-55 marketing season. Official reports put 26,510,444 bushels under loans and purchase agreements as of Dec. 15, 1954.

Farm prices have averaged well above the support level, but the large volume is believed due mainly to use of the loan for credit.

In round figures, 29 million bushels were placed under price support on the same date in 1953. The total for the 1953-54 marketing season was 31.8 million bushels under support.

**EXPORTS.** Department of Agriculture market officials see a possibility now of soybean exports reaching above the 50-million-bushel total estimated at the start of this season. With certain provisos:



By **PORTER M. HEDGE**  
Washington Correspondent for  
The Soybean Digest

One is that prices hold at a fairly stable level and don't take off toward the \$3 mark and higher. Most officials are pretty sure in their own minds this won't happen this year, with stocks so much larger now than a year ago.

Another is that the demand for soybeans remains very strong in the Far East, principal area for our exports in the last couple of years. So far, there has been nothing to indicate that this demand for U. S. soybeans would ease off, at least this year, even though it is known the Japanese would like to do more trading with Red Manchuria.

Around 28 million bushels of soybeans were exported during the first three months of the season, October-December. This is an estimate based on actual shipments during October, inspections for export during the other two months, and about 2 million bushels shipped to Canada.

The 28 million total is 4.5 million bushels more than for the same period a year ago. Thus, the first quarter gets exports off well ahead of last year when the total reached approximately 40 million bushels.

The estimate of 50 million total shipments this year was based on an assumption that prices would average lower this season; that there would be fluctuations within a narrower range; and that shipments would continue fairly steady throughout the year rather than being shut off sharply during the latter part of the season.

The first two assumptions have been true so far. Average price to growers for soybeans during the first three months was \$2.56 a bushel, with a very narrow range of \$2.51 to \$2.57. A year ago the average was slightly higher, \$2.60 for the first three months, but the range was wider—\$2.41 to \$2.81.

The operating officials largely concerned with soybean exports haven't had a get-together to re-examine prospects, but most of them feel there is a fair chance of going above the 50 million mark now—say at least to 55 million, possibly



## SEEDBURO

### MODEL "B" HYTROL

#### Folding Belt Conveyor

**CHECK THESE FEATURES**

- Handles up to 150 lb. bags, boxes or cartons
- Reversible at flip of switch
- Easily elevated up to 45° angle
- Heavy-duty, sturdy, welded steel construction
- 3-ply, Ruff-Top belt to grip material handled
- Can be folded in 4 sq. ft. area for convenient storage

**MOVES BAGS, BOXES  
and CARTONS Faster  
at Lower Cost**

The Hytrol Conveyor is built to give you many years of service. Easily elevated to height required to handle material between floors, and in and out of your warehouse. Two men can stack more bags than 4 to 6 can manually. A Seedbuero Hytrol usually pays for itself in less than a year of normal use.

"World's Leading Supplier of Grain Testing Equipment for Over 40 Years"

# SEEDBURO

(SEED TRADE REPORTING BUREAU)

## EQUIPMENT COMPANY

Dept. 5D2 618 W. Jackson Blvd., Chicago 6, Ill.



higher. They point out, there need not be much of an increase in shipments during the next three quarters for this to be realized.

Soybean exports of \$2,420,000 in value to Formosa were announced recently by the Foreign Operations Administration. The beans are to be contracted for between now and June 30, and delivered next fall.

The Foreign Agricultural Service reports northbound movement of Chinese soybeans through the Suez Canal during the first 10 months of 1954 were about 342,000 tons (11,400,000 bushels), compared with 336,000 tons for the period in 1953.

The man who may have a large role in future dealings with the Japanese concerning imports of soybeans from the United States is William D. (Dewey) Termohlen, an extension service poultry specialist in Iowa for a number of years, and more recently head of USDA's Marketing Service poultry branch.

Termohlen is successor to Wolf Ladejinsky, whose firing as agricultural attache in Tokyo by the Agricultural Department stirred up a temporary furor in Washington. Termohlen has gone to Europe to attend an international poultry meeting, and will return to this country before taking his new assignment.

**PROTEINS.** The most recent "Feed Situation" put out by the Agricultural Marketing Service has revised tables showing the growing importance of soybeans in the protein meal supply.

It also has revised and brought up to date a series going back to 1926 showing the quantity of high proteins available for feeding expressed in equivalent tonnages of present-day soybean oil meal, with another series showing the numbers of high-protein feed consuming animal units.

Soybean meal has been by far the most important of the high protein feeds since 1942. In recent years, soybean meal has accounted for

more than 45 percent of the total amount of digestible protein feeds.

Here are the official USDA estimates of the supplies of major oilseed meals for the current feeding year, and a year ago:

Meal	1954-55	1953-54
Soybean	6,000,000 tons	4,965,000 tons
Cottonseed	2,450,000 tons	2,888,000 tons
Linseed	550,000 tons	527,000 tons
Peanut	25,000 tons	63,000 tons
Copra	200,000 tons	196,000 tons
	9,225,000 tons	8,639,000 tons

The estimate of total oilseed meals expressed in terms of the feeding value of present-day soybean meal runs only to 8,477,000 tons for the current feeding year, against 7,811,000 tons a year ago.

The feed values are expressed in terms of current 44 percent protein content soybean oil meal.

Total number of high-protein consuming livestock for the current season is estimated at 109.4 million units, or 1.4 million units higher than a year ago. However, because of the larger supply, the volume per animal unit is also up a little this season—to 217 pounds against 211 pounds for each of the preceding two years.

The protein using animal units are based on re-weighting of the old grain consuming animal units to reflect their importance as consumers of protein feeds.

The revised tables show an up-trend in both the supply of high protein feeds and the number of animal units using these feeds. The increase in supplies, however, is greater than the increase in protein using livestock. However, there's more to the story. AMS says:

"Supply per animal unit does not tell the whole story. The decline in the protein content of corn during the last 20 years has increased the quantity of protein feeds required to balance livestock rations. Furthermore, livestock production has increased per animal unit. More grains and other feeds are required per animal to obtain increased production of milk per cow, more eggs per hen, and to provide

for increased grain-fattening of cattle. There is still need for further improvement, especially for some classes of livestock, and in some areas of the country."

## Heads Memphis Board

**DIXON JORDAN**, a leader in Memphis grain brokerage circles since 1946, was elevated to the presidency of the Memphis Board of Trade Jan. 9.

Mr. Jordan, president of the Standard Commission Co. at Memphis, served as vice president of the Board of Trade in 1953. He succeeds Lee D. Canterbury, manager of Cargill, Inc.



Dixon Jordan

Elected vice president was Fred C. Lovitt, a partner in L. B. Lovitt & Co. Mr. Lovitt will become Board of Trade president in 1956.

Directors elected were C. W. Butler, Jr., vice president of Union Planters National Bank; J. Steward Buxton, a partner in E. E. Buxton & Co.; W. R. Flippin of Buckeye Cotton Oil Co.; D. J. Guillory of Guillory Sales Co.; Ed Jappe, president of Marianna Sales Co.; P. S. "George" Seeds of Quaker Oats Co.; H. D. Tobias of Goldenrod Oil Meal Sales Co.; and Mr. Canterbury.

A. A. Williams, in his annual report, revealed that cottonseed oil meal futures sales for 1954 tripled those of 1953 and that soybean oil meal futures were 67 percent larger than last year.

He said the grain inspection department was doubled in size last year and now is one of the most modern in the country, enjoying a high efficiency rating.

Highlight of the election luncheon was an address by Wilbert E. Hoge, vice president of Central Soya Co. Inc., on "What Is a Speculator?"

MEMBER: CHICAGO BOARD OF TRADE • NEW YORK PRODUCE EXCHANGE

W. M. SIMERAL & COMPANY

*Brokers*

VEGETABLE OILS

BOARD OF TRADE BUILDING • 141 WEST JACKSON BOULEVARD • CHICAGO 4, ILLINOIS • HARRISON 7-3612

# --- MARKET STREET ---

We invite the readers of THE SOYBEAN DIGEST to use "MARKET STREET" for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here. Rate: 10c per word per issue. Minimum insertion \$2.00.

**FOR SALE — FLAKING AND** cracking rolls, meal toasters, filter presses, hammer mills, Anderson 14-inch conditioners, 36-inch cookers, Pittock & Associates, Glen Riddle, Pa.

**BUY SURPLUS FARM TOOLS.** machinery, truck, tractor from U. S. government. Government surplus list \$1.00. Box M213, East Hartford 8, Conn.

**WE ARE SELLING THE ARNOLD** Mill machinery. All Nordyke & Marmon 9"x30" and 9"x36" double roller mills, collar oilers, roller feeders. One 200 n. p. G.E. induction motor, 2200 volts 3 phase 60 cycle 300 RPM. One 200 h.p. Westinghouse induction motor, 440 volts 3 phase 60 cycle 900 RPM. One 75 h.p. Westinghouse induction motor, 2200 volts 3 phase 60 cycle 900 RPM. Starter equipment with each motor—all in good condition. O. L. Randall, P. O. Box 403, Sterling, Kans.

**FOR SALE—SEVERAL THOUSAND** bushels of Roanoke, Ogden, Clemson, JEW 45, Jackson, Dortchsoy and Black Wilson seed soybeans for sale. Gurley Seed Co., Phone 2303, Selma, N. C.

**WANTED—MAJOR OIL COMPANY** seeking qualified sales representative for engineering service and sale of extraction solvents and aromatic naphthas in Iowa and Missouri. Submit full educational and experience background, together with small photograph. Box 319, Soybean Digest, Hudson, Iowa.

**FOR SALE—WOLFE 9 inch x 36** inch 2-Pair High Roller Mill. Purchased new January, 1949. Used two years only. Also, two 30-inch filter presses. Reasonably priced. Allied Mills, Inc., of Virginia, Portsmouth, Va.

**MOTORS - GENERATORS — ALL** sizes, new and rebuilt. Starters, accessories, pulleys and repair parts. Gear motors, Falk Shaft mounted reducers. V-belt drives. Expert repair service. Nussbaum Electric Co., 220 E. Douglas Ave., Fort Wayne, Ind.

**NEW AND USED GRAIN AND** Seed Cleaning Equipment bought and sold. Len Jacobsen Co., 3437 5th Ave. S., Minneapolis 8, Minn.

**BUYING — YOUR SURPLUS AC-** cumulations of cotton and burlap bags of all descriptions. Your inquiries are invited. Sterling Bag & Burlap Corp., 41 Carolina St., Buffalo 1, N. Y.

**DEHYDRATING PLANT FOR** Sale—Due to the growth of our feed manufacturing business, lack of space forces us to sell our dehydrating plant. All in good condition. Melody Mills, Inc. Libertyville, Ill.

## SEED DIRECTORY

A charge of \$3 will be made to subscribers for listing one variety in the March and April issues; and \$1.50 for each additional listing. Quantity for sale and variety are listed.

### ALABAMA

Coffee Springs—McAuley Farms, Rt., 2,200 bu. registered Jackson.

### ARKANSAS

Blytheville—J. C. Ellis, Jr., 712 Pecan, 1,500 bu. certified Dorman.

Burdette—G. A. Hale, Hale Seed Farms, 5,000 bu. registered Hale Ogden No. 2.

Marion—C. A. Stockley, 3,500 bu. blue tag certified Ogden.

Stuttgart—Jacob Hartz Seed Co., P. O. Box 109, uncertified Ogden, uncertified Volstate, uncertified J.E.W. 45, uncertified Ralsoy, uncertified Dortchsoy 31.

### ILLINOIS

Arcola—Irvine E. Thompson, Rt. 3, 4,000 bu. uncertified Hawkeye.

Carthage—Huey Seed Co., Ph. 53, 2,000 bu. certified Hawkeye, 2,000 bu. certified Lincoln, 2,000 bu. certified Adams, 2,000 bu. certified Clark, 2,000 bu. certified Harosoy. Also non-certified varieties.

Clinton—Claude W. Thorp & Sons Co., Rt. 3, 2,500 bu. certified Hawkeye.

Geneseo—C. D. Ford & Sons, Rt. 4, 600 bu. certified Harosoy, 600 bu. certified Hawkeye.

Gibson City—Noble Brothers Seed Co., good stocks certified Clark, certified Wabash, certified Lincoln, certified Hawkeye, certified Harosoy, certified Adams; uncertified Clark, Harosoy, Lincoln, Adams and Hawkeye.

Metamora—Ezra Schlipf, 2,400 bu. registered Clark grown from foundation seed on own farm.

Morton—Elmer D. Baer, 2,000 bu. certified Clark, 1,000 bu. non-certified Harosoy, 1,500 bu. non-certified Bavender Special, 2,000 bu. non-certified Lincoln, 2,000 bu. non-certified Adams, all germination 85% or better.

Paris—Oscar Wimmer, Rt. 1, 1,600 bu. certified Hawkeye, 1,000 bu. uncertified Hawkeye, 1,000 bu. uncertified Lincoln.

San Jose—Kelly Seed Co., 14,000 bu. non-certified Hawkeye, 4,000 bu. certified Hawkeye, 3,000 bu. certified Lincoln, 6,000 bu. certified Harosoy, 6,000 bu. certified Clark.

Sidney—S. A. Buddemeier, Rt. 1, 1,200 bu. field certified Harosoy.

Sullivan—Landers Seed Co., certified Clark, certified Harosoy, certified Hawkeye, uncertified Hawkeye, uncertified Lincoln, uncertified Adams.

Ursa—Frank W. Lewis, 2,500 bu. certified Harosoy, 1,800 bu. registered No. 2 Hawkeye, 2,000 bu. registered No. 2 Lincoln, 2,400 bu. registered No. 1 Clark, 2,000 bu. certified Perry.

### INDIANA

Evansville—J. A. McCarty Seed Co., 526 N. W. Fourth St., certified Clark, cer-

tified and non-certified Wabash, certified and non-certified Perry.

Lewisville—Willard Pickering, Rt., 1,000 bu. certified Clark.

Poneto—Fred F. Grover, Rt. 1, 500 bu. certified Lincoln.

Remington—Chester B. Biddle, Biddle Farms, 4,000 bu. certified Harosoy, 2,000 bu. certified Hawkeye.

Remington—Silver Lane Farms, 4,000 bu. certified Lincoln, 2,000 bu. certified Hawkeye, 10,000 bu. certified Harosoy, 600 bu. certified Blackhawk, 1,500 bu. certified Clark.

Valparaiso—Wyckoff Hybrid Corn Co., Rt. 3, 2,500 bu. certified Harosoy, 500 bu. certified Richland, 700 bu. certified Hawkeye, 500 bu. certified Lincoln, 1,000 bu. uncertified Monroe, 500 bu. uncertified Korean.

### IOWA

Cedar—Joseph C. Hoskins, 2,000 bu. uncertified Bavender, 150 bu. certified Clark.

Charles City—Sar Seed Farms, 1,000 bu. certified Blackhawk.

Keota—Elvin H. Luers, 500 bu. certified Clark.

Marcus—Sand's Seed Service, 5,000 bu. certified Lincoln, 4,000 bu. certified Adams, 2,000 bu. certified Clark, 25,000 bu. certified Hawkeye, 40,000 bu. uncertified Hawkeye, 3,000 bu. uncertified Blackhawk, 10,000 bu. uncertified Harosoy.

Underwood—E. D. Ravlin, 400 bu. certified Clark.

### MINNESOTA

Canby—Eldred Buer, Rt. 3, blue tag certified Harosoy and Ottawa Mandarin.

Hartland—Sig. Borge & Son, 75 bu. registered Renville, 75 bu. Ottawa Mandarin, 75 bu. Blackhawk.

Madelia—Lickfett Elevator Co., 1,000 bu. certified Harosoy, 400 bu. certified Blackhawk, 800 bu. certified Capital, 600 bu. uncertified Pride 57, 100 bu. registered Renville.

### MISSOURI

Essex—Trailback Plantation, Inc., Rt. 1, 900 bu. certified Ogden.

Hornersville—Soybean Storage & Elevator Co., 2,000 bu. certified Dorman, 5,000 bu. certified Ogden, 500 bu. uncertified Ogden.

Hoskins—William W. Ware, Ph. 2820, 940 bu. certified Clark.

Louisiana—Farm Supply Co., 1,000 bu. certified Clark, 500 bu. uncertified Adams, 1,000 bu. uncertified Lincoln, 100 bu. certified Harosoy.

Spickard—Howe Bros., Rt. 1, 1,050 bu. certified Clark.

St. Louis—Cypress Land Farms Co., 314 Merchants Exchange Bldg., certified Hawkeye, certified Adams, certified Clark, certified and uncertified Perry, certified and uncertified Ogden, certified Dorman.

### OHIO

Covington—Ebberts Field Seed Co., Ph. 5031, 5,000 bu. certified Hawkeye.

### VIRGINIA

Clay Bank—Louis Groh & Son, 10,000 bu. uncertified Black Wilson, 50,000 bu. uncertified Ogden, 5,000 bu. uncertified S-100.

Parkesley—Paul J. Sterling, 1,500 bu. registered Ogden.

Virginia Beach—Jordan-Hancock Grain Co., P. O. Box 334, 500 bu. uncertified Woods Yellow, 4,000 bu. uncertified Ogden.

### ONTARIO

Chatham—Borrowman Grain Co., Ltd., Box 155, 6,000 bu. registered or certified Harosoy and other varieties.

Chatham—St. Clair Grain & Feeds Ltd., Box 330, 2,000 bu. registered No. 1 Harosoy, 1,000 bu. certified No. 1 Lincoln.

Be sure to mention the Soybean Digest when writing to our advertisers.



## IN THE MARKETS

**STOCKS ON FARMS.** Stocks of soybeans on farms Jan. 1 are estimated at 150 million bushels, the largest of record, according to the crop reporting board of the U. S. Department of Agriculture. Current stocks are 84 percent larger than a year ago and 44 percent above the previous high of 104 million bushels on farms Jan. 1, 1952. The 10-year average Jan. 1 farm stocks is 66 million bushels.

From a total supply of 343 million bushels on Oct. 1, 1954, (1954 production of 342,795,000 bushels plus 529,000 bushels farm carryover) 193 million bushels moved off farms in the October-December quarter, the same as for the like quarter a year earlier, but below the record of 216 million bushels which moved from farms in the October-December quarter in 1952. Although harvest of the 1954 crop was slower than last year, considerable quantities moved from farms to processors and to commercial storage before Oct. 1. This quantity is included in the apparent disappearance for the October-December quarter.

Farm stocks are especially heavy in the North Central states. This area accounts for 143 million bushels or 95 percent of the U. S. total. The South Atlantic and South Central states combined show about 7 million bushels in farm storage as of Jan. 1, only 2 million above the relatively low stocks of a year ago.

SOYBEAN STOCKS ON FARMS JAN. 1 (1,000 bu.)

State	Average 1944-53	1954	1955	State	Average 1944-53	1954	1955
N. Y. ....	92	39	62	Md. ....	342	289	619
N. J. ....	147	180	211	Va. ....	770	641	811
Pa. ....	228	181	214	N. C. ....	1,301	815	1,227
Ohio ....	6,698	7,221	14,260	S. C. ....	229	500	410
Ind. ....	9,586	11,770	19,835	Ga. ....	84	189	105
Ill. ....	20,076	19,711	39,652	Fla. ....	13	28	28
Mich. ....	809	941	1,738	Ky. ....	549	374	717
Wis. ....	302	357	580	Tenn. ....	422	405	454
Minn. ....	4,448	11,632	22,416	Ala. ....	127	151	120
Iowa ....	12,418	16,388	27,391	Miss. ....	903	510	740
Mo. ....	3,603	5,880	11,291	Ark. ....	810	805	1,273
N. Dak. ....	77	124	550	La. ....	131	64	76
S. Dak. ....	240	744	1,775	Okl. ....	67	50	11
Nebr. ....	262	680	2,466	Texas ....	65,839	81,599	150,267
Kans. ....	807	913	906				
Del. ....	296	232	321				

**PRICES.** Average price for soybeans received by farmers, effective parity price and price support rates (dollars per bu.)

Average farm price	Effective parity	Average price as percent of parity	National average price support rate
Dec. 15 1953	Nov. 15 1954	Dec. 15 1954	Dec. 15 1953
2.81	2.57	2.57	92
			2.56
			2.22

Average farm and parity prices from crop reporting board.

**SOYBEANS, No. 2 Yellow:** Average monthly price per bushel at Illinois country shipping points, October 1946 - October 1954


Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Avg.
	—Cents per bushel—												
1946-47	322	317	288	307	320	393	362	312	312	330	317	314	325
1947-48	338	369	394	423	343	352	388	400	414	379	319	273	366
1948-49	243	255	252	240	218	220	215	225	220	250	277	220	236
1949-50	216	210	220	220	225	245	268	290	300	310	275	245	252
1950-51	230	272	295	310	325	325	325	324	304	294	287	277	297
1951-52	280	290	295	290	290	288	282	292	317	322	325	298	297
1952-53(1)	285	289	290	285	282	294	295	287	276	256	255	247	278
1953-54	257	283	299	303	317	349	380	363	366	370	355	272	326
1954-55	269												

(1) Prices for Grade No. 1 since September 1953. Since the latter part of September 1953, most of the processors have been buying soybeans on the basis of No. 1 Grade. However, the same price was generally paid for No. 2 Grade provided the degrading factors were either test weight or splits. Discounts were applicable for any of the other degrading factors below No. 1 Grade.

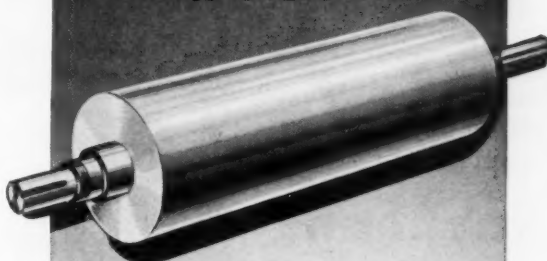
**SHORTENING.** Standard shortening shipments reported by the Institute of Shortening and Edible Oils, Inc., in pounds.

Dec. 25	3,746,807
Jan. 1	4,576,166
Jan. 8	5,602,062
Jan. 15	4,968,961

Grand total of shortening shipments for 1954 was 302,490,000 pounds as compared with 258,392,000 pounds for 1953.



**HERMANN  
BAUERMEISTER  
ROLLS**




for corrugated- and smooth roller mills have proved to work economically in all parts of the world since decades.

Normal chilled cast iron- or alloy rolls are being manufactured with most modern technical installations by high experienced experts.

The latest scientific research is applied in order to reach super-production.

Spalling and pitting does not appear even at heaviest loads and highest speeds.



**N. HUNT MOORE**

2065 Union Avenue  
Memphis, Tennessee  
Telephone: 2-2403

# Use KALO

You get more beans, more hay  
and more "free" nitrogen from  
the air for your soil.

KALO INOCULANT CO., Quincy, Ill.

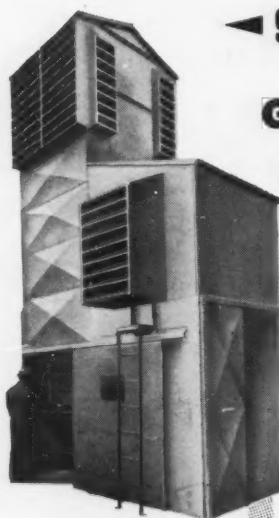
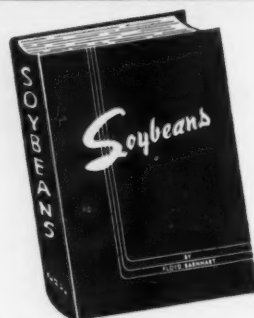
JUST OFF  
THE PRESS

## Soybeans

By Floyd Barnhart

Latest available information  
on soybeans. You will want  
a copy.  
Chapters on varieties, all  
phases of production, har-  
vesting, storing, insects and  
diseases, prices, distribution and marketing.  
290 pages bound. 124 illustrations. Price \$3.75.

Order from  
**SOYBEAN DIGEST, Hudson, Iowa**



**SHANZER**

## GRAIN DRIERS

give you this above  
everything else:

- 1 HIGHER CAPACITY
- 2 LOWER DRYING TEMPERATURE
- 3 MORE UNIFORMLY DRIED GRAIN
- 4 OUTSTANDING SAFETY RECORD

Designers and  
Manufacturers

- Columnar Driers
- Max-i-Pacity Elevators
- Conveying Machinery

**SHANZER** MANUFACTURING CO.

85 BLUXOME ST. • SAN FRANCISCO 7, CALIF. • PHONE SUTter 1-5200

**FUTURES TRADING.** New records were set in trading in soybean futures and in soybean oil and meal during the calendar year 1954, according to Rodger R. Kauffman, administrator of the Commodity Exchange Authority, U. S. Department of Agriculture.

A record total of more than 6.1 billion bushels of soybean futures traded reflected the wide price ranges and increased speculative activity in the commodity. Kauffman pointed out, however, that hedging in soybean futures increased considerably as compared with the previous year.

In soybean oil, total trading of 5.4 billion pounds also was larger than any previous year, due primarily to increased activity on the Chicago Board of Trade.

The volume in soybean oil meal futures was at an all-time high of nearly 6 million tons, reflecting a record volume on the Chicago Board of Trade, and a near-record volume on the Memphis Board of Trade Clearing Association.

Volume of futures trading, all contract markets combined, 1953 and 1954

Commodity	Unit	1953	1954	Percent change
Soybeans	1,000 bu.	3,604,872	6,168,642	+ 71.1
Cottonseed oil	1,000 lbs.	1,488,120	711,900	- 52.2
Soybean oil	1,000 lbs.	3,122,400	5,397,420	+ 72.9
Cottonseed meal	tons	97,400	296,400	+204.3
Soybean meal	tons	2,519,000	5,975,100	+137.2

Open contracts in commodity futures, all contract markets combined, end of December 1953 and 1954

Commodity	Unit	Open contracts end of December		Net change
		1953	1954	
Soybeans	1,000 bu.	114,270	118,724	+ 4,454
Cottonseed oil	1,000 lbs.	52,500	78,360	+ 25,860
Soybean oil	1,000 lbs.	189,240	212,820	+ 23,580
Cottonseed meal	tons	13,900	22,100	+ 8,200
Soybean meal	tons	292,400	403,300	+110,900

Figures for Dec. 31, 1954, are preliminary.

Futures prices on principal markets

Commodity	Market	Unit	Closing prices of near future		
			Dec. 31 1953	Dec. 31 1954	Net change
Soybeans	Chicago	Cents per bu.	310 <sup>3</sup> / <sub>4</sub>	285 <sup>3</sup> / <sub>4</sub>	-25
Cottonseed oil	New York	Cents per lb.	14.96	15.30	+ .32
Soybean oil	New York	Cents per lb.	12.23	11.99	-.24
	Chicago	Cents per lb.	12.14	11.92	-.22
Cottonseed meal	Memphis	Dollars per ton	60.50	66.00	+ 5.50
Soybean meal	Memphis	Dollars per ton	71.75	68.25	- 3.50
	Chicago	Dollars per ton	71.50	68.40	- 3.50

**INSPECTIONS.** Soybeans, inspected by grades and percent, as reported by USDA's Agricultural Marketing Service.(1)

Grade	Oct.-Nov. 1953	Oct.-Nov. 1954	November 1953	October 1954	November 1954(2)
	1,000 bu. %	1,000 bu. %	1,000 bu. %	1,000 bu. %	1,000 bu. %
No. 1	26,147 26	14,420 14	5,734 20	9,021 18	5,399 11
No. 2	39,654 39	47,962 48	11,774 41	25,840 51	22,122 45
No. 3	15,547 15	27,530 28	5,509 19	11,064 22	16,456 33
No. 4	12,647 13	7,293 7	3,243 12	3,174 6	4,119 8
Sample	6,940 7	2,790 3	2,291 8	1,290 3	1,500 3
Total	100,935 100	99,985 100	28,551 100	50,389 100	49,596 100

(1) Carlot receipts have been converted to bushels on the basis that 1 carlot equals 1,750 bushels. (2) Of the November 1954 receipts, 42,800 bushels were black and the remainder yellow soybeans. Inspections of soybeans in November included 6,151,211 bushels as cargo lots, 5,928,427 bushels as truck receipts, and the balance as carlot receipts.

Grade	Oct.-Dec. 1953	Oct.-Dec. 1954	Dec. 1953	Nov. 1954	Dec. 1954(2)
	1,000 bu. %	1,000 bu. %	1,000 bu. %	1,000 bu. %	1,000 bu. %
No. 1	32,758 26	16,213 14	6,611 28	5,399 11	1,793 11
No. 2	48,659 39	56,305 48	9,005 38	22,122 45	8,343 50
No. 3	19,376 16	31,629 27	3,829 16	16,456 33	4,109 25
No. 4	14,813 12	8,698 8	2,166 9	4,119 8	1,405 8
Sample	8,972 7	3,800 3	2,032 9	1,500 3	1,010 6
Total	124,578 100	116,645 100	23,643 100	49,596 100	16,660 100

(1) Carlot receipts have been converted to bushels on the basis that 1 carlot equals 1,750 bushels. (2) Of the December 1954 receipts, 4,700 bushels were black, 1,750 mixed, and the remainder yellow soybeans. Inspections of soybeans in December included 3,938,718 bushels as cargo lots, 1,843,526 bushels as truck receipts, and the balance as carlot receipts. Based on reports of inspections by licensed grain inspectors at all markets.

**EXPORTS.** U. S. Exports of soybeans and soybean oil for October, as reported by the Foreign Agricultural Service of the U. S. Department of Agriculture.

Soybeans	6,417,793 bu.
Soybean oil	
Crude	585,560 lbs.
Refined but not further processed	4,400,297 lbs.
Refined, deodorized and hydrogenated	126,206 lbs.

Converted to a soybean equivalent basis the exports for October amounted to 6,930,522 bushels.

SOYBEAN DIGEST

# SUPPLY AND DISTRIBUTION of the 1953 and 1954 soybean crops, reported by Agricultural Marketing Service (1,000 bu.)

	1953-54	1954-55
Carryover (1) .....	10,137	1,327
Production .....	268,528	342,795
Total supply (2) .....	278,665	344,122
Farm use including seed for season .....	27,000	27,000
Quantity remaining for processing, export, or carryover .....	251,665	317,122
Disappearance through Nov. 30 (3) .....	41,568	43,933
Crushed for oil or processed (4) .....	15,919	19,168
Exported .....	57,487	63,101
Total .....	194,178	254,021
Balance on Dec. 1 for processing, export, or carryover .....		

(1) Stocks as of Oct. 1. (2) Imports negligible. (3) October through November. (4) No allowance is made for new crop crushings prior to Oct. 1.

# FACTORY USE VEGETABLE OILS for October and November as reported by Bureau of the Census (1,000 lbs.)

## FACTORY PRODUCTION AND CONSUMPTION, AND FACTORY AND WAREHOUSE STOCKS, NOVEMBER 1954 - OCTOBER 1954

	Factory production		Factory consumption		Factory and warehouse stocks	
	Nov. 1954	Oct. 1954	Nov. 1954	Oct. 1954	Nov. 30 1954	Oct. 31 1954
Cottonseed, crude .....	215,781	219,744	171,510	170,682	144,267	105,742
Cottonseed, refined .....	161,193	161,362	156,937	148,136	(1)712,619	817,314
Soybean, crude .....	239,625	235,894	226,919	215,930	96,887	91,115
Soybean, refined .....	210,262	198,863	204,223	200,722	59,988	54,679
Olive, edible .....			217	241	5,702	5,924
Olive, inedible .....			31	29	80	71
Coconut, crude .....	33,216	43,159	40,851	47,974	(2) 63,336	(2) 52,343
Coconut, refined .....	25,685	30,698	22,382	27,433	11,129	10,318
Vegetable foots (100% basis) .....	20,325	20,957	14,264	12,807	48,056	49,066

(1) Includes 588 million pounds of refined cottonseed oil reported by respondents to the Census Bureau as owned by Commodity Credit Corporation. This figure, as well as the comparable Oct. 31, 1954, figure of 729 million pounds, includes quantities sold for export by CCC but not "lifted." As of Nov. 30, CCC reported that it had removed from inventory and put in an "in-transit position to other storage" about 36 million pounds of refined cottonseed oil, all of which is estimated to have been accounted for in respondent reports to the Census Bureau.

(2) Data for stocks of crude coconut oil are on a commercial stocks basis and do not include figures for stock piles of strategic oils.

## CONSUMPTION OF VEGETABLE FOOTS IN FAT SPLITTING (1,000 lbs.)

	1954		1953	
	Nov. 1954	Oct. 1954	Nov. 1954	Oct. 1954
Nov. 1954	9,879	9,232	11,607	121,782

## FACTORY CONSUMPTION OF VEGETABLE OILS, BY USES, DURING NOVEMBER 1954 (1,000 lbs.)

	—Edible products—				—Inedible products—			
	Shortening	Margarine	Other edible	Soap	Chemicals	Paint and varnish	Lubricants and greases	Other inedible
Cottonseed, refined ..	20,749	5,262	3,409	.....	85	.....	.....	66
Soybean, crude .....	46,295	7,723	3,194	.....	401	.....	.....	1,247
Soybean, refined .....	32,226	28,295	.....	.....	6,156	15	5,517	.....
Hydrogenated cottonseed oil, edible .....	45,264	60,314	1,399	.....	.....	.....	.....	.....
Hydrogenated soybean oil, edible .....	.....	.....	.....	543	.....	53	.....	155
Fatty acid stocks .....	.....	.....	.....	.....	.....	.....	.....	.....

# PROCESSING OPERATIONS, reported by Bureau of the Census for November and December.

## PRIMARY PRODUCTS, EXCEPT CRUDE OIL, AT CRUDE OIL MILL LOCATIONS: PRODUCTION, SHIPMENTS AND TRANSFERS, AND STOCKS, DECEMBER 1954 - NOVEMBER 1954

Products	Unit of measure	Production Dec. 1954	Production Nov. 1954	Shipments and transfers Dec. 1954	Shipments and transfers Nov. 1954	End of month stocks Dec. 31 1954	End of month stocks Nov. 30 1954
Soybean:							
Cake and meal .....	tons	484,569	507,260	485,399	517,580	47,104	47,934
Lecithin .....	1000 lb.	2,177	2,268	2,066	2,306	1,704	1,593
Edible soy flour, full fat .....	tons	(1)	(1)	(1)	435	92	73
Edible soy flour, other .....	tons	5,013	5,284	5,305	5,054	913	1,205
Industrial soy flour .....	tons	3,936	6,246	(1)	6,385	(1)	1,280

(1) Not shown to avoid disclosure of figures for individual companies.

## SOYBEANS: RECEIPTS, CRUSHINGS, AND STOCKS AT OIL MILLS, BY STATES, DECEMBER 1954 - NOVEMBER 1954 (Tons of 2,000 pounds)

State	Receipts at mills		Crushed or used		Stocks at mills	
	Dec. 1954	Nov. 1954	Dec. 1954	Nov. 1954	Dec. 31 1954	Nov. 30 1954
U. S. ....	451,608	1,068,777	635,439	665,920	1,338,382	1,522,213
Arkansas .....	3,693	31,833	4,766	7,889	67,924	68,997
Illinois .....	185,449	299,456	261,190	278,765	441,372	517,113
Indiana .....	32,497	106,604	69,479	64,501	153,677	190,659
Iowa .....	65,183	207,046	107,861	114,707	175,717	218,395
Kansas .....	(1)	(1)	(1)	(1)	(1)	(1)
Kentucky .....	11,978	(1)	15,627	16,471	(1)	(1)
Minnesota .....	47,456	50,226	43,758	40,941	24,057	20,359
Mississippi .....	(1)	7,652	(1)	12,072	36,234	46,467
Missouri .....	13,553	66,708	20,920	24,509	91,549	98,916
Nebraska .....	(1)	(1)	(1)	(1)	(1)	(1)
No. Car. ....	(1)	(1)	(1)	(1)	7,408	5,019
Ohio .....	52,206	171,703	64,532	67,865	148,518	160,944
Oklahoma .....	(1)	(1)	.....	.....	(1)	(1)
All other .....	39,593	127,518	47,306	38,200	191,926	195,444

(1) Included in "All other" to avoid disclosure of figures for individual companies.

## SOYBEAN PRODUCTS: PRODUCTION AND STOCKS AT OIL MILL LOCATIONS, BY STATES, DECEMBER 1954 - NOVEMBER 1954

State	Crude oil (thousand pounds)			Cake and meal (tons)		
	Production Dec. 1954	Stocks Nov. 1954	Production Nov. 30 1954	Production Dec. 1954	Stocks Nov. 1954	Production Nov. 30 1954
U. S. ....	227,765	239,625	25,481	25,758	484,569	507,260
Arkansas .....	1,418	2,372	(1)	407	3,651	6,298
Illinois .....	97,073	104,397	9,180	9,485	193,277	203,875
Indiana .....	25,515	23,548	2,225	1,594	53,906	50,345
Iowa .....	37,462	39,825	4,655	4,964	83,982	90,308
Kansas .....	(1)	(1)	(1)	(1)	(1)	(1)
Kentucky .....	5,633	6,064	266	(1)	11,896	12,675
Minnesota .....	14,639	14,091	2,392	2,251	33,647	32,175
Mississippi .....	(1)	4,162	398	621	(1)	9,620
Missouri .....	7,509	8,672	910	1,444	16,288	18,802
Nebraska .....	(1)	(1)	(1)	(1)	(1)	(1)
N. Car. ....	(1)	(1)	(1)	(1)	(1)	784
Ohio .....	22,399	23,631	2,961	1,821	50,144	53,057
All other .....	16,117	12,843	2,494	3,181	37,776	30,115

(1) Included in "All other" to avoid disclosure of figures for individual companies.

We are in the market for Soybean Screenings and Soybean Mill Feed.

WHAT HAVE YOU?

**T. M. Dinsmore & Co., Inc.**

3520 O'Donnell St.  
Baltimore 24, Maryland  
Feeds Since 1885

**Farmer City Grain**

Growers and Shippers  
of  
Soybeans

Large acreage of New Clark Seed Beans.  
Adaptable to wide area.

Also

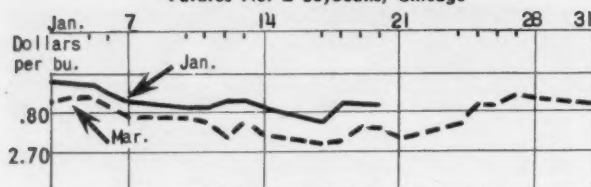
Lincoln, Hawkeye, Harosoy and Adams

Farmer City, Ill.

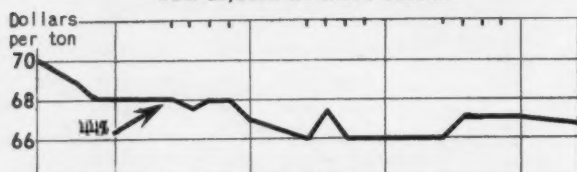
Tel 2185



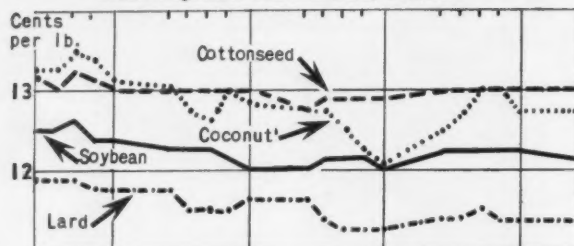
## DAILY MARKET PRICES Futures No. 2 Soybeans, Chicago



### Bulk Soybean Oil Meal, Decatur



### Crude Vegetable Oils and Lard, Tankcars



## January Markets

SOYBEANS, meal and oil, after showing some weakness during the month, began to pick up strength toward the month's end. The January option in soybeans closed out at the lowest point since early October. But March futures began to advance about midmonth.

Two opposing forces kept the market in check:

1—The government's report showing 150 million bushels of soybeans still on farms and the realization that half or more of the crop is still to move dominated the thinking in the trade. The belief apparently was still somewhat general that a price readjustment is inevitable, the only question being one of time. The possibility of the first real carryover of beans into the new crop year coupled with a larger 1955 planted acreage was being pointed out.

2—The failure of the anticipated after Jan. 1 movement of soybeans to market to materialize. There was uncertainty about the volume of soybeans that would go under loan, but it was expected to be large. (Bache & Co. estimated 45 to 50 million bushels.)

Farmers apparently marketed just about enough soybeans during January to keep processor stocks at an even keel. Processors were replacing their inventories on a hand-to-mouth basis and were not disposed to book large forward sales of their products. The government's report showed two months' supply on hand Jan. 1.

Other reasons for relative strength in January:

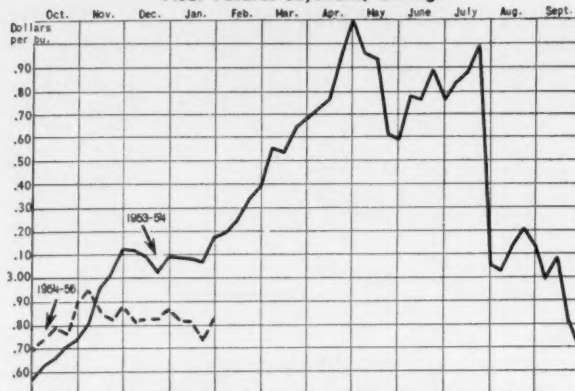
1—Drastic reductions in deliverable supplies in Chicago. Total the first of the month was 2.3 million bushels, about half the volume of supplies the same time a year ago.

2—The volume of exports was running ahead of the year earlier date. Washington observers tended to raise their earlier 50-million-bushel forecast of beans to be exported during this crop year a little.

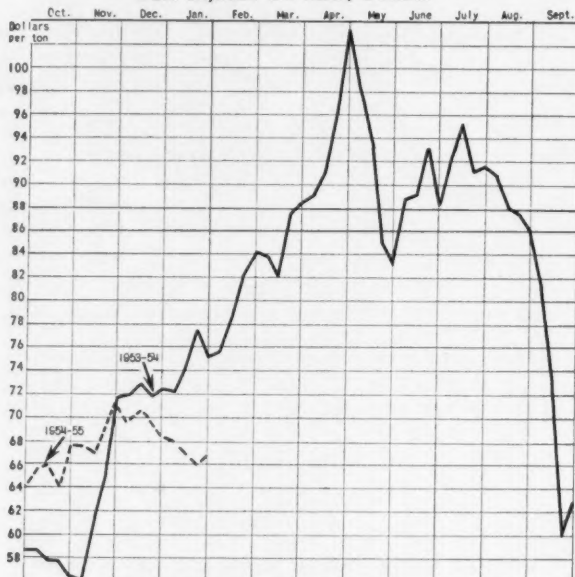
3—Processors were able to achieve a satisfactory margin at times during the month.

4—The uncertain political situation. It was being noted that if Far East hostilities break out some foreign buyers who would usually purchase soybeans from Manchuria may turn to the United States for supplies. This did much to stimulate buyers' interest in edible vegetable oils.

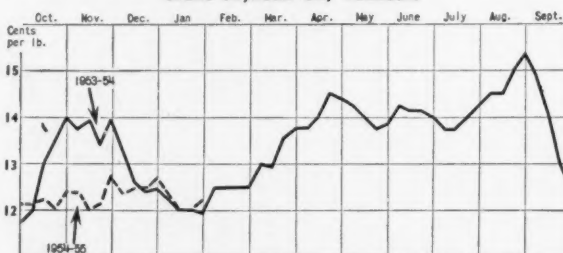
## TRENDS AT A GLANCE (Friday prices) Near Futures Soybeans, Chicago



### Bulk Soybean Oil Meal, Decatur



### Crude Soybean Oil, Tankcars



Offsetting this were reports that Japan may reduce import quotas drastically if the foreign exchange situation shows further deterioration.

Sustaining the soybean oil market in addition to the producers' holding movement was the ease with which government stocks of cottonseed oil have moved into export channels. But Trade News Service (New York, raised the question of whether Europe can digest these heavy purchases of cottonseed oil, which has been priced the cheapest of any oil in world markets, without price repercussions.

**SOAP STOCKS.** Acid soybean soap stocks delivered Midwest gained five-eighths cents and closed at 5¼ cents a pound in January. Raw soybean soap stocks advanced from 2¼ to 2½ cents a pound.

Soybean fatty acids advanced from 13 to 14½ cents a pound and were quoted at the head of the list of fats and oils during January.



*Mike Master says:*

# Can you match this Chick Starter Promotion ?

DIRECT MAIL  
ADVERTISING

MOTION  
DISPLAYS PROGRAM

STORE BANNERS  
AND CUT-OUTS

LOCAL AND  
NATIONAL ADVERTISING

SPECIAL  
PROMOTIONS

MANAGEMENT  
MANUALS

FEEDER INSTRUCTIONS

**MASTER MIX DEALERS'** sales guns are loaded . . . ready for the biggest chick starter selling season of all. Their efforts are backed by strong merchandising and advertising programs hitting the feeders in their area through newspapers, farm magazines, direct mail, and with effective reminder advertising at the point of purchase, in mill or store.

Master Mix dealers have profitable, fast-selling feeds! Either their own brands made with Master Mix Chick Concentrate or Master Mix Chick Starter. They can sell the recognized advantages of these high efficiency feeds with the Master Mix exclusive, Methio-Vite, the spark-plug of growth.

Yes, Master Mix dealers are ready to sell . . . how about you? If you believe you too would like this sales-winning opportunity, let us hear from you at once. Master Mix is on the move and can use good, substantial dealers in selected territories. Write us today.

McMillen Feed Mills **MFM** Master Feed Merchandisers



*I've got the feed  
that sells, and builds  
tonnage for me—*

**MASTER MIX!**

**This Promotion Can be Yours This Year • WRITE TODAY**

McMILLEN FEED MILLS, Fort Wayne, Indiana

Send me at once complete information on how to become a Master Mix Dealer.

NAME

ADDRESS

CITY

STATE



# PHILLIPS 66 SOLVENTS

*uniform quality makes extraction easier!*

**YOU KNOW** what you're getting when you use uniform Phillips 66 Solvents. You can really depend on their narrow boiling range. No light ends, no heavy residues to complicate extraction operations. Phillips 66 Solvents are tested, checked and controlled all along the line to assure uniformity and purity.

**YOU'RE SURE** that Phillips 66 Solvents will arrive in excellent condition because special care is taken in storing, handling and shipping these high quality solvents.

**YOU'RE WELCOME** to avail yourself of Phillips expert technical advice on solvent problems. Phillips large-scale production and storage facilities provide Phillips customers with a dependable solvent supply at all times. Write for complete information.

**PHILLIPS PETROLEUM COMPANY**

**Special Products Division**

**Bartlesville, Oklahoma**

